JANUARY • 194

WHOLESALER'S SALESMAN

FOR ELECTRICAL WHOLESALERS AND SALESMEN

. . . without cutting power

Moving machinery—changing shop set-ups —is an everyday job in modern war plants. But it's a quick and easy job in plants equipped with sectionalized, prefabricated "plug-in" Bus Duct.

No cutting, taping or other fabrication is necessary in making the original installation — or in changing the location of a machine or a whole production battery.

Just move the circuit protective "plug" right with the machine, mount it on the Bus Duct at the "plug-in" opening nearest the new location — and the job is done without cutting power, interrupting production, or taking the dangerous alternative of tapping in "hot."

All through America's non-stop production drive Bus Duct is saving countless man-hours, multiplying efficiency, protecting against fire and sabotage, safeguarding human life . . . and all this with a minimum use of critical materials.

Modern Bus Duct is an integral part of the machine tools it serves. Small wonder that it has become a *necessity* in present-day mass production.

BUY MORE WAR BONDS—SALVAGE ALL SCRAP METAL

BULLDOG
ELECTRIC PRODUCTS CO.
Detroit, Michigan
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Field Engineering Offices in All Principal Cities

BULLDOG "PLUG-IN" SYSTEMS—THE ARTERIES THAT SUPPLY POWER AND LIGHT FOR WAR PRODUCTION

Electrical wholesaling

WHOLESALER'S SALESMAN

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Director of Circulation:
Please change my address on WHOLESALER'S SALESMAN

From .....

.....

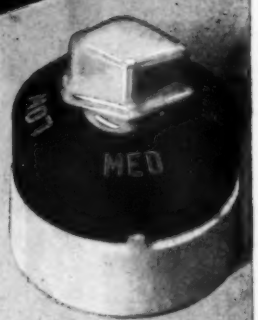
To .....

.....

Signed .....

TK1
.J6

Maintain the plants behind the guns with dependable H & H SWITCHES



Maintain plant facilities in *ACTION* — *without interruption* of light or power. Every machine and lighting unit energized through dependable Controls, — H&H Controls. For these are vital PRODUCTION controls that regulate the amount of work your machines and operators can do.

"Hot wires", heavy loads, round-the-clock operating schedules, — these demand super-stamina in Switches. . . Even minor shut-downs cause shortages at the front.

So install *or* replace with H & H Switches for continuous, positive *ACTION* on your production-lines. . . Heavy-duty controls for lighting and power circuits; specification-grade T-rated 10, 20 and 30 Amp. "Type C" Switches, Rotary Snap Switches, Ceiling Pull Switches, Door Switches, Flush Tumbler Switches with or without outlet box covers. You'll find in them the fighting Quality to keep functioning, — the sure-fire DEPENDABILITY for war production.

HART & HEGEMAN DIVISION
ARROW-HART & HEGEMAN ELECTRIC COMPANY, HARTFORD, CONN.

TIMES and TRENDS

Exit Henderson It had to come sooner or later. that resignation of Leon Henderson as chief of the Office of Price Administration. In fact, we have wondered why it did not happen earlier.

Neither peace, defense program or war ever created a job, more strenuous and at the same time so nasty and thankless as the one Mr. Henderson tackled. That he managed to carry on as long as he did and bring price control along as far as it is today, was due chiefly to those same Hendersonian characteristics that eventually made his exit inevitable.

Price controls appear to be indispensable not only as a war measure but also as protection against run-away inflation and post war disaster. Whether any successor to Henderson will come through with a better record of performance than he did remains to be seen.

Certain is the fact that none will try harder, and—if success in price control can be measured by the number of politicians, farm and labor leaders, all yelling for a single scalp at the same time, then no successor will equal Mr. Henderson's record.

★

Inventory Control L-219 Released just in time for brief mention here WPB order L-219 applies to retailers, wholesalers and manufacturer's stock-carrying branches, that as of November 30, 1942 had an inventory of $50,000 or more *at cost of consumer goods* and that had net sales of $200,000 per year.

Consumer goods are defined as goods suitable for sale to individuals for personal or household use.

Controls of inventories will be on a quarterly basis with restrictions on buying imposed upon those, whose inventories at the beginning of a quarterly period are larger in proportion to sales, than was the relation of inventory to sales in the base period 1939, 1940 and 1941.

Donald M. Nelson, WPB chairman stated that purpose of the order is to assure smaller stores, particularly those in outlying regions, a better opportunity to compete with large stores in metropolitan areas for a fair share of the limited amount of consumer goods now available.

While this present order is of immediate interest only to those electrical wholesalers, who have large stocks of appliances, it deserves the careful study of all wholesalers.

★

Worth Watching Few of us realize that as a by-product of this war emergency the government has become a very formidable competitor of every one of the nation's retailers and wholesalers, to say nothing of its being a real contender in the mail order field.

Every Army post has its "Post Exchange" and every Navy station or ship has its service store, and if anyone doubts the importance of this activity, let them note that according to *Business Week,* the "ship's service store" of one naval station has 20 branches, supports 800 civilian employees, did $875,000 worth of business in a single month just recently.

In appraising the significance of this trend, important is the fact that these "PX" stores can extend A-10 priorities ratings, which permit them to obtain many materials that are no longer available for civilian use.

No one will begrudge our soldiers, sailors and marines having an opportunity for buying things they want for personal use or to send to the "folks back home." Danger is that the figures on sales volume and particularly on operating expenses and net profit of these subsidized and monopoly-protected stores may be used as a yard stick for gauging what private enterprise should be able to do in open competition.

Much of all business will be done under rigid regulations after the war and that will be the time when wholesalers may catch up with some of the "basic figures" that were derived from operations under government monopoly.

★

Layaway Buying Attention is being given to plans by which the public will be invited to buy now through regular payments the credit which will guarantee delivery of an automobile, refrigerator, air con-

A LIGHTING FIXTURE HAS A BIG

Here are the

to questions that contractors, wholesalers, chief electricians, maintenance and purchasing departments about Fluorescent Lighting fixtures

1. How can I be sure of getting fixtures that will give satisfactory lighting performance?

By specifying fixtures that have been tested and certified for electrical, mechanical and lighting efficiency by independent experts. Certified FLEUR-O-LIER fixtures meet *50 definite standards* set up by MAZDA lamp manufacturers to assure dependable performance. They are tested and *Certified* to those standards by Electrical Testing Laboratories, Inc., of New York.

2. Who makes these tested and certified fixtures?

Certified FLEUR-O-LIERS are made by over 40 leading fixture manufacturers. Any fixture manufacturer who complies with the FLEUR-O-LIER requirements may participate in the program.

3. What are some of the points checked by this testing?

Some of the most important specifications checked by Electrical Testing Laboratories are: High power factor, flicker correction, certified ballasts and starters, brightness control, safety, maximum light output, correct heat dissipation and many others.

4. Don't other makes of fixtures have these features?

Perhaps. But you can be sure of them *all* in Certified FLEUR-O-LIERS. And because they are Certified by E.T.L., any further test or check by the user is unnecessary.

5. Do FLEUR-O-LIER fixtures have non-metallic reflectors?

Many FLEUR-O-LIER Manufacturers are now making Certified fixtures using non-metallic reflectors, which conform to WPB order L-78 (Amended) and to U.S. Bureau of Standards Specifications. FLEUR-O-LIER specifications also cover these units.

ditioning unit, other large appliances, "when, if and as" models are available for selection and delivery. Several major appliance makers are ready. Others are apt to follow suit.

Wholesalers with an eye on the tremendous post-war appliance boom will do well to keep an eye on this development and get "in" while the getting is good.

Certain influential government officials favor plans of this type, when they provide proper safeguards for the public.

★

Electronics Latest war-time use of the "electronic eye" is in one of the tests, applied to those who are eager to become pilots in our Air Service. The "eye" measures and records emotional reactions to sudden external influences as reflected in the varying degrees of color or pallor of the—finger tips.

Use of hundreds of different electronic devices in our war effort invites the conclusion that in the post-war era hundreds of new electronic products will come on the market.

One nationally prominent business analyst predicted recently that electronics might well become a household word and that the advance of science in this field during 2 or 3 years of war probably would equal those, made ordinarily in 30 or 40 years of peace-time progress.

★

Appliance Servicing Over 900 appliance and radio wholesalers, dealers and servicemen of New York City and vicinity heard WPB and OPA officials supplying explanations and interpretations of various rules and orders including OPA Service Regulation No. 165.

Wholesalers and distributors were urged to use Form PD-1X in applying for repair parts. It was pointed out that the degree of ESSENTIALITY of an appliance will determine whether repair parts should be supplied. Service price ceilings, filed under OPA Service Regulation 165 cannot be changed after January 1, 1943, except where adjustments become necessary on an industry wide basis.

★

1943 Income Latest official estimates are that income payments to individuals were over $117 billion in 1942 and are likely to exceed $135 billion in 1943.

This means that in 1943 people will have roughly 65 percent more money to spend than they had in 1929 our biggest boom year, while the supply of available merchandise of all kinds will be smaller than in many years.

In such circumstances price controls are absolutely necessary if inflation and all its disastrous consequences are to be averted. To cooperate with the government in its effort to save the country from run-away inflation is the duty of every right-minded citizen.

For The Record That Seventy-Seventh Congress made a record for appropriations that, we hope, will never be equalled—around $150,000,000,000; AND—it passed the biggest tax bill in our history, but that record, we believe, will soon fall; AND—in the last 2½ years 1,522,000 new employees have been put on Federal payrolls, exclusive of the military.

★

Wealth Distributed Those politicians who have for years called for redistribution of wealth will have less and less to complain about if the democratic processes, evident during the last 13 or 14 years are allowed to take their course.

Witness the fact that big corporations, of which some were controlled by a small clique for many years, today are owned by thousands of stockholders. "Blue Chip" concerns have today 3 or 4 times as many stockholders as they had in 1929. General Electric, with 60,400 stockholders in 1929 had 220,000 in 1941. Even aristocratic du Pont gained 50,000 new part owners in that period, while its stable mate, General Motors took in 224,000 new partners. If that is not spreading the wealth, what is?

★

Man Bites Dog It's an old story, the one about the city editor of a metropolitan daily explaining to a cub reporter that "when a dog bites a man, that's not news, but—when a man bites a dog, that's news."

The Federal Trade Commission starts law suits, files complaints, issues cease and desist orders in such copious quantities, that editors rate its actions as news only when some particular case involves a broad public interest or some local concern or association.

But—it's hot news, when some concern sues the Federal Trade Commission, and that's exactly what the Miles Laboratories, Inc., of Elkart, Ind., has done, after first refusing to sign a "Stipulation."

Since in recent years F.T.C. has extended its activities in many directions and at a terrific rate, the case has created nationwide interest. Miles, in its suit is asking for declaratory judgment, wants to obtain judicial interpretation of the Federal statutes, affecting the F.T.C. Final decision may have far-reaching effect on F.T.C.'s future policies and practices.

EDITOR

VARNISHED CAMBRIC · RUBBER POWER CABLES · BUILDING WIRE · RADIO WIRES · SIGNAL CABLE · FLEXIBLE CORDS · LEAD-ENCASED AND PARKWAY CABLES · ARMORED CABLE

CRESFLEX NON-METALLIC SHEATHED CABLE · SERVICE ENTRANCE CABLE · MAGNET WIRE · BARE WIRE

CRESCENT

ANSWERED THE CALL

Long before Pearl Harbor we were in total production for Defense. Now we are in

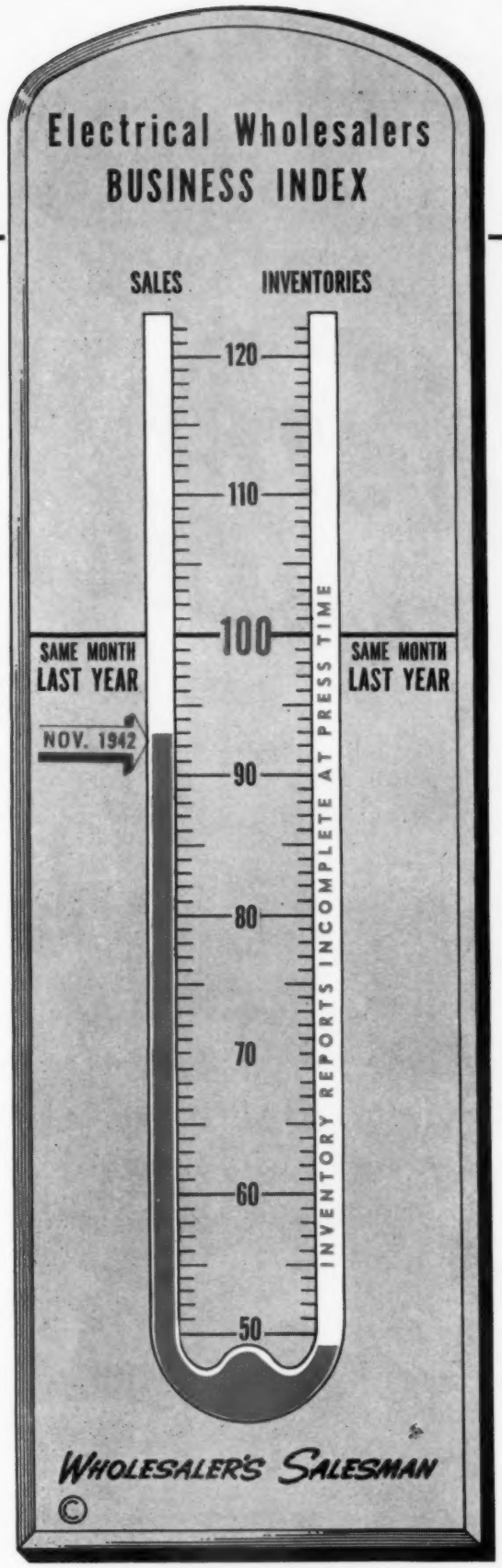
Total Production for War!

CRESCENT INSULATED WIRE & CABLE CO.

CRESCENT
WIRE and CABLE
Factory: TRENTON, N. J.—*Stocks in Principal Cities*

JOBBER COOPERATION—A PERMANENT POLICY

CRESCENT ENDURITE SUPER-AGING INSULATION · WEATHER-PROOF WIRE



Business Index
For the Month of November, 1942

SALES Sales of electrical goods throughout the United States, as based on an average of the sales of 319 wholesalers, were only 8 percent below the dollar volume recorded in the same month of 1941.

This is the best showing for sales, when compared with 1941, that has been indicated for any month since April of this year. It brings re-emphasis to some points brought out here last month when it was predicted that the November and December year-to-year comparisons would begin to approach more closely the 1941 totals. It seems probably now that total sales for December will show up on the index here next month as even closer to 100 percent of the same month of last year.

Government-released statements have indicated that the production of war goods swung into high gear during November. This would make it probable that wholesalers in those regions where industry is the major purchasing power, will begin soon to feel the demand for those materials that industry will need for maintenance, repair and production.

Another factor evident in the good showing of November sales when compared with the same month of last year, is the probable fading out of the influence of appliance sales on the overall sales performance.

When compared with the dollar sales volume of the previous month, wholesalers' sales in November were down 11 percent. This small drop, following a period of several months in which month-to-month sales had held to an even keel, is probably the result of the continued tightening of the copper situation. The demand for copper products for maintenance and repair has been increasing steadily with a resultant shrinking of stocks in the hands of wholesalers. Meanwhile, replacement shipments of copper products have become steadily slower.

INVENTORIES The number of reports available from wholesalers at the time of going to press was not sufficient to justify publishing an index figure on inventories.

COLLECTIONS For the country as a whole, collection percentages averaged 73 percent. This is 1 percent lower than the revised collection percentage for October, and well ahead of the 67 percent figure for November, 1941.

SOURCE These monthly reports covering the business activities of electrical wholesalers throughout the United States are collected and compiled by The Bureau of the Census of the U. S. Department of Commerce.

General Cable has been making your report to the Nation, in a series of advertisements you must have read. We are endeavoring to spotlight the vital story of what the Electrical Industry is doing as a prime participant in our national effort. We are telling America through the pages of influential magazines and newspapers what the Supply Houses and their contractor and industrial customers, as well as the power utilities, have accomplished. Your example of teamwork and determination should be known by everyone and remembered when the job is done.

GENERAL CABLE GENERAL CABLE GENERAL CABLE

General Cable Corporation Sales Offices are located at Atlanta, Boston, Buffalo, Chicago, Cincinnati, Cleveland, Dallas, Detroit, Houston, Kansas City (Mo.), Los Angeles, New York, Philadelphia, Pittsburgh, Rome (N.Y.), St. Louis, San Francisco, Seattle, Washington (D. C.)

A SHOCK for Mr. Hitler

THIS is no mere play on words. Ours is a war of production... of armaments, of guns, of ships, of war materials. It is a war of speeded-up manufacturing... of machines and machinery.

And back of machinery is power... electric power that keeps production humming. Truly, the crushing blow that will eventually bring the Axis to its knees will come from the power of electricity as much as from the power of explosives. Yes, the stunning effect of this electrical power may well be called "a shock for Mr. Hitler".

Where is it coming from? Whence this gigantic massing of electric power from the Nation's generating plants? Whence the supply to meet the pyramided demand for wires, cables, switches, terminals... the thousand and one items that go into the making, transmitting and using of electrical power?

It came out of the teamwork that is the American way of doing things. The power companies threw into it their ready-and-waiting plans for plant expansion – for interconnection of systems, for unleashing their pools of power. The electrical manufacturers came through with increased production. The electrical supply warehouses looked after the distribution of equipment to meet the time schedules.

And back of it all, Washington guided, coordinated and applied the pressure where needed. To the War Production Board must go a lion's share of the credit. For the miracle has been wrought. Wherever a machine was installed in America's far-flung war-production line – there the wiring and the power were ready and waiting to start the wheels turning.

The Electric Power in back of American industry packs a wallop – an electrical wallop – a terrific "shock for Mr. Hitler".

☆ Not just one shock for Hitler... but a Series of JOLTS!

Nearly half of the entire productive capacity of all our industries breaking all records in turning out war material. . . .

More than 50% of the world's greatest concentration of Electric Power working to lick the Axis.

An Electric Utility industry with systems interconnected, fuel reserves accumulated, water power husbanded – keeping pace with any war-industry expansion.

Utility Engineers bringing typical resourcefulness into play when power loads mount – ready to find ways to push boiler efficiencies beyond all previous limits, to install new-type cables to deliver the extra power. . . .

Newly built hydro-electric plants adding their to the vast output of the commercial generating stations.

Armies of skilled electrical contractors out on the industrial firing line, installing the wiring for constantly expanding production – guns, shells, tanks, ships, planes! . . .

Men, pledging their skill to keep every electric installation in A-1-A maintenance condition.

GENERAL CABLE CORPORATION

Manufacturing Plants from Coast to Coast

ARMY-NAVY

...ED WIRES AND CABLES FOR EVERY ELECTRICAL PURPOSE

WHOLESALER'S SALESMAN BUSINESS INDEX

REGIONAL ANALYSIS

EVIDENT in an analysis of regional sales of electrical goods by wholesalers in November, are the strong sectional differences in performance. For example, regions 1, 2 and 9 reported sales at more than 100 percent of the volume of November, 1941, but regions 3, 4 and 6 showed total sales at 67, 59 and 67 percent, respectively of the volume of the same month of last year.

Evident as a direct influence causing this great discrepancy between geographical sections is the basic economic make-up of those parts of the country, and a varying effect of war production on them over a period of the last two years.

Regions 1, 2 and 9 are comprised of the traditionally industrial states of the eastern and western seaboard. Quick to swing into war work with their existing production facilities, these states felt an immediate surge of war business back in 1940 and early 1941. By November, 1941, industry in these states was operating at nearly full production but the regions were not undergoing any large new construction boom. By November of this year, industry in these territories was drawing on wholesalers for maintenance and repair and production goods at a rate which would naturally top the amount needed a year ago.

Regions 4 and 6 are two of the most complete agricultural sections of the country. However, in late 1941 they experienced a boom when many army cantonments and strategically-located war plants were under construction there. Sales of electrical goods in those regions now, in 1942, compare unfavorably with last year because it is apparent that new construction could not be kept at the 1941 pace, and that neither the army camps nor the war plants as yet need maintenance and repair materials at a rate approaching the amount that was needed for new building.

In connection with performance in the East North Central States (region 3), where November sales were at 67 percent of the November 1941 level, it must be remembered that although many of these states are highly industrialized, they include not only the automobile manufacturing districts but also much country where in 1941 much new construction was under way. The materials needed a year ago for the early work in the conversion of auto plants and for new building far exceeded what was needed in November of this year when most of the conversion and new work was completed.

NOVEMBER, 1942

SALES November, 1942 Compared in % with		Trading Region	INVENTORIES November, 1942 Compared in % with	
October 1942	Nov. 1941	(See Map)	October 1942	Nov. 1941
95	101	1		
91	121	2		
83	67	3	INVENTORY REPORTS INCOMPLETE AT PRESS TIME	
83	59	4		
97	97	5		
90	67	6		
82	79	7		
86	92	8		
90	114	9		
89	92	For U. S. A.		

Power—Giant Arm of Production

Ninety Per Cent of American Industry Is Electrified

ELECTRICITY is the mainspring that turns the wheels of our factories, mills and mines. It is the tireless arm that grinds our grain, weaves our cloth, pumps our water, builds our planes, our guns, our ships, our cars, our trucks and tanks . . .

The mighty Pharaohs had less energy at their disposal in building their pyramids than is generated today by one single power plant. The combined capacity of America's central power systems is without parallel in the history of the world . . . 46 million kilowatts, i.e., 65 million horsepower in steam turbines, hydro turbines and other prime movers. That is more power, day in and day out, than 650 million slaves could produce—for a limited time—minutes in fact.

The capacity of this vast fountain of energy is beyond the grasp of the average man who flips a switch and sets in motion machines that perform the labor of a thousand man-hours in a matter of minutes. Perhaps only the old time farmer, whose traditional source of power is a team of tired horses and a pair of calloused hands, knows how to appreciate this commodity that is so vital an ingredient of everything we consume and use.

Yes, we take electricity for granted. We expect it to appear in unlimited quantities, like water and air, as we need it. Almost as essential as these two elements in times of peace, it becomes a matter of life and death in times of war. Industry would collapse without it and the nation would quickly perish.

With the catastrophe of Pearl Harbor a little over a year ago, came the realization that we had to out-produce our enemies. To out-produce our enemies, who had a seven year head start, meant to turn more wheels than they were turning and to turn them faster than they were turning them.

New plants sprung up overnight. Production increased beyond our wildest dreams. Aircraft and shipbuilding surpassed the most daring forecasts. The machine tool industry's output grew to a volume that bordered on the miraculous. Guns, shells, uniforms, shoes, tanks and a thousand other items were being made in hitherto undreamed of quantities. All of them have one common essential ingredient – power. Industry demanded power – more and more power!

It is no small tribute to the power industry that, while other raw materials developed shortages necessitating strict priorities control, electricity remains unrationed – no priorities, no curtailments, no rate increase. Current industrial consumption is running 16 per cent over 1941 and 50 per cent over 1940. Not spectacular perhaps but when we consider that the nation's 26 million domestic consumers utilize only about 14 per cent of the energy output, we begin to get some idea of industry's power consumption.

Our power companies might have been stunned by the prospect of mounting demands for kilowatts. Instead they set about developing and coordinating a multiplicity of relatively small and seemingly unrelated factors. Individually or even collectively, these have not been of a spectacular nature. Certainly they have not inspired the award of the Army-Navy E although they are an essential ingredient in every Army-Navy E that has been awarded to American industry.

The contribution of the power industry to the winning of the war is not likely to flame forth in newspaper headlines. It takes the more prosaic turn of portraying an industry that is doing wonders quietly, unobtrusively.

At the close of the last war the power at the disposal of the American industrial worker averaged 3⅓ horsepower. At the beginning of this war, twenty years later,

This is the seventh of a series of editorials appearing monthly in all McGraw-Hill publications, reaching more than one and one-half million readers, and in daily newspapers in New York, Chicago and Washington, D. C. They are dedicated to the purpose of telling the part that each industry is playing in the war effort and of informing the public on the magnificent war-production accomplishments of America's industries.

it had increased to 6½ horsepower. What other nation can even approach that figure? This large provision of power is the achievement of the electric utility industry. For years it had built and applied its equipment to the highest standards of performance and operated its systems to equally high standards of service and dependability. Always recognizing that "public service is a public trust" it had maintained wide margins of security in performance. Today these margins are the source of the power industry's ability to rise to the emergency.

In short, the electric utilities were prepared!

Power men are accustomed to looking ahead, to prepare for growing loads and allow for unforeseen contingencies, for electricity cannot be stored. It is "ordered" by touching a switch. It is delivered and consumed at the same moment.

Months before the actual outbreak of hostilities foresighted power men set to work computing how much life of equipment could be risked in the process of crowding it toward greater output. Generators, boilers, turbines, cables, transformers and even conductors underwent close scrutiny in an effort to increase the load – *safely*. They figured, they experimented, they tried untried measures.

Insulation, for example, is the crux – the least known component of electrical apparatus. When it lets go the service suffers. It is not easy to know how near any bit of crucial insulation is to letting go. It takes courage to work it to a point just short of failure . . . but that is exactly what is being done today.

Technological forcing of equipment, however, is not all of the story. Obsolescent equipment has been rehabilitated; salvage has been intensified; critical metals have been replaced by non-critical materials; water sprays, air-blowers and other cooling methods have been installed to keep over-loaded apparatus from over-heating. Nothing has been overlooked. Ingenuity has contrived the well nigh impossible.

Hand in hand with these measures of expediency have gone measures of intensification. Hydrogen pressure for cooling generators has been stepped up from ounces to pounds taking more heat away from the machines and enabling them to carry greater loads. Capacitors – little more than aluminum foil interleaved with thin paper – have been applied by the carload relieving the systems of that mysterious reactive current which is associated with that equally mysterious power factor. They have performed wonders in avoiding the need for additional generating and transforming equipment. The use of portable sub-stations has averted the otherwise necessary reserve capacity in fixed installations at many points.

When coal was placed on the urgent list last spring the electric utilities outstripped all other industries in providing storage for the winter. Stocks on hand the first of October were sufficient for 105 days, or more than twice what would be considered adequate in times of peace.

When staff losses to the armed forces became serious power companies contrived measures that enable them to get along without aggravating the national manpower situation by hiring others to replace them. Today meters are being read every two or three months instead of monthly; women are being trained to do drafting, keep the logs in power plants and sub-stations and to test meters in shops and laboratories.

On the summit of "Grandpa's Knob", a mountain overlooking Rutland, Vermont, stands a giant windmill that would have been the delight of Don Quixote. Towering 200 feet above the tree tops its mighty 175 foot propeller turns with the wind and drives a 1,000 kilowatt generator which feeds its output into the Central Vermont Public Service Corporation's power system. The most ambitious wind-turbine generator in the world, and a daring experiment of forward-looking men.

Today everything electrical is being tried; is being worked harder than it has ever been worked before.

Great credit is due the men behind the electric power industry. These men have recognized the responsibility of their jobs – it is a part of their very being. Theirs is the kind of service that *must* be maintained. No soldier is truer to his trust than is the employee of this great industry.

The service must go on! No matter what happens – acts of God or deeds of men – the service must go on! Labor disturbances may disrupt other industries but there have been no shutdowns due to labor trouble in electric power plants since Pearl Harbor.

And this winter when blizzards pile up drifts and sleet makes pavements slippery there may be absenteeism from other plants but the utility employees will be on the job ready to climb the ice-covered poles and repair the ice-laden lines whenever the call comes.

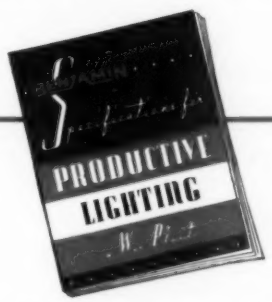
In this war the least costly yet the most precious element of production – electricity – will be ever ready to "man" the machines that will produce the weapons that will give victory to the forces of freedom.

James H. McGraw, Jr.

President, McGraw-Hill Publishing Company, Inc.

How *KEENER EYES* Can Help to *SUSTAIN* Production*

In the human eye you'll find the answer to why proper lighting is so important, why it increases the speed and ease of seeing, thus conserving energy which otherwise is wasted in trying to see!



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to make certain you are not overlooking important lighting factors essential to a sustained flow of increased output.

Contains complete data on how to approach, analyze and solve lighting problems. How to analyze the seeing task and determine lighting requirements. Valuable data on lighting as it relates to the problems of increased production, fatigue, accident reduction, greater utilization of floor space, 24 hour operation, etc. Also 21 ready to use solutions of lighting problems most frequently encountered in war production plants. Sent free of cost or obligation. Simply address your request to Benjamin Electric Mfg. Co., Dept. GG, Des Plaines, Ill.

Experience in England and in our own production has proven the importance of doing everything possible to correct those conditions which adversely affect the endurance of men and women to sustain both the quantity and quality of output day after day and month after month.

High on the list of things to do to conserve employee endurance and to minimize fatigue is to insure KEENER EYES for every employee in the plant by providing the proper lighting for every seeing task!

Relationship of Lighting to Fatigue. Inadequate or improper lighting has been shown to be an important factor in employee fatigue.* *Because it takes energy to see!** The act of seeing involves thousands of tiny eye muscles, nervous and physical energy.* Time spent in trying to see, therefore, involves physical fatigue.* The greater the effort of the eye to see, the greater the drain on the body's energy reserve. Such fatigue in turn is reflected in reduced production rates and increases in errors, defects and spoilage.

Save Energy . . . Increase Health and Efficiency of All Employees. Provide proper lighting and the extra energy formerly required in trying to see can be converted into useful production energy, increasing the worker's ability to stay on the job for longer periods of time without detriment to his well being. Raise the lighting levels and older eyes are raised to the efficiency of young eyes . . . less drain results on their reserve energy . . . the extra light helps compensate for the older employee's loss of visual acuity.*

Reduce Accidents. Often closely allied to the fatigue problem is the problem of accidents.* Striking examples of the close relationship between the quality of the lighting and the accident frequency are not difficult to find. For example . . . in one plant, accidents decreased 11 percent after the old lighting system was replaced with a new one.*

Proper Lighting is Productive Lighting. Proper lighting is a production tool that is of vital importance in sustaining high output. The amount of light considered proper is determined by the seeing task involved. In general, the greater the difficulty in seeing the object or work, the higher the lighting levels required*. Most industrial and office tasks today require from 35 to 75 footcandles of illumination in comparison with today's estimated average of seven and one half footcandles. Productive lighting, however, is not just plenty of light. Equally important is the quality of the light provided.* It must be suitable in regard to direction, diffusion, glare and shadow.

Function of Lighting Equipment. It is the function of Benjamin Lighting Equipment to provide lighting of both proper quantity and quality required by the seeing task. Available for this purpose are Benjamin units of many types utilizing either Fluorescent, Incandescent or Mercury lamps as a light source. Typical solutions utilizing this equipment are given in the "Benjamin Specifications for Productive Lighting in War Plants" described at left.

Request your copy, available now, without cost or obligation. Write Benjamin Electric Mfg. Co., Dept. GG, Des Plaines, Illinois.

* *Authority for many of the statements contained in this advertisement are based upon data contained in the publications of the Illuminating Engineering Society, the National Safety Council, the publication "Plant Efficiency" by the War Production Board and* American Recommended Practice of Industrial Lighting *approved by the American Standards Association.*

BENJAMIN TRADE MARK

WORLD LEADER IN INDUSTRIAL LIGHTING EQUIPMENT

ELECTRICAL WHOLESALERS . . .
Where Do They Stand A

By O. Fred. Rost, *editor*

AT no time in the history of the electrical wholesaling industry has it been more desirable, in fact imperative, that its present status and future prospects be cold-bloodedly appraised than right now, at the beginning of the year 1943. Such appraisal is desirable for two specific reasons, the first one is obvious, in that during these troubled times any individual or firm engaged in electrical wholesaling is necessarily wondering about the future and what it may bring. The second reason is a product of these times, in that rumors and erroneous statements made in various quarters have confused the minds of many, and have created the impression that wholesalers of all types are more or less on the shelf for duration and possibly "on the way out" for good. If there were any truth or justice in those latter statements surely it should not be difficult to obtain supporting evidence. Yet this writer, after diligent search, can find only evidence to support the contention that electrical wholesalers are very much a part of our entire war effort and appear securely entrenched in the business mechanism of our country.

Wholesalers Have Gained

The first assaults on wholesaling as an industry were made unobtrusively soon after the National Defense Program was inaugurated in June 1940. Pressures toward the elimination of wholesalers had relaxed but little when the sneak attack on Pearl Harbor pitched our country into the World War. Therefore, it might be said that wholesalers stood at the most critical point of this period just one year ago, at the beginning of 1942.

Within the twelve months that have passed since then, wholesalers have merged from the crisis and risen to a status of official recognition such as they have not enjoyed previously in any emergency period. This fact is evidenced in the establishment, early in 1942, of a Distributors' Branch by the War Production Board which latter is the duly appointed and all powerful government agency dedicated to the prosecution of our War Production Program. That Distributors' Branch, now known as the Distributors Division, may undergo some reorganization along with certain major reorganization processes that are now underway, but at this writing there is nothing on the horizon to indicate that the recognition of wholesalers as essential factors in our war effort will diminish.

Individual Wholesalers MIGHT Lose

Obviously, such a change in status from one of being merely tolerated to that of having official recognition, accomplished within the short space of twelve months, is something well worth talking about.

While wholesaling as an industry has established itself firmly, many individual wholesalers have not recognized the seriousness of the emergency and have failed to consolidate their individual position either in their own community or territory or in their relations with the government agencies that control our business operations.

Numerically, those delinquents represent perhaps ten percent of the total number of concerns engaged in the business, but in line with the old story about one rotten apple spoiling a barrel full of good apples those delinquent wholesalers can conceivably do serious harm to all members of the industry. Every wholesaler must realize that the controls and regulations established by the government must be observed and that no release from that responsibility need be expected until some time after the war is won. Therefore, for self protection and in the interest of the entire industry, wholesalers who themselves are observing all the rules and regulations might well establish local committees of wholesalers that would function as vigilantes, not merely helping all wholesalers to understand current rules and regulations but also inducing them to comply with those requirements.

LOOKING AHEAD

Not since the beginning of the first World War has there been a time when it was more difficult to anticipate future trends and prospects. Nevertheless, this writer believes that certain recent developments and signs on the horizons might be put together and referred to here.

Wholesalers' Year 1943

Sales volume may be expected to settle down to a level somewhat below 1942 and yet above 1940. This, of course, will apply only to concerns operating in or near so-called defense or war production areas while sales of concerns located elsewhere will necessarily recede substantially below 1942 levels.

Replacement Stocks

The pattern for assuring wholesalers a steady flow of replacement

d And What Is Their Outlook

stocks, as determined by various government rulings, is not yet complete. Certain activities of the War Production Board are now being reorganized. The new and so-called Controlled Materials Plan, reviewed elsewhere in this issue, is not expected to exert its full influence on the flow of materials until the middle of 1943.

The set-up in the Distributors' Division of the War Production Board is being changed and most of the important forms such as PD-1X, PD-336, P-100 etc., are being revised. All of this, with the objective to simplify procedure, speed up processing and insure fairer and more equitable distribution of available materials in accordance with the respective importance of their end-use to our war effort.

It is probable that during the first half of 1943 the shortage of certain materials will reach a climax and that thereafter gradual improvement in the availability of materials will come.

Wholesalers' Future

The point of greatest acuteness in the material shortage, which this writer believes will be reached in 1943, probably will also mark the peak of withdrawals, temporary or permanent, of concerns from the electrical wholesaling field. It is important to note that, rumors to the contrary not withstanding, the end of 1942 found less than two percent of reputable wholesale houses in this country closed either for duration or for good.

Study of the position of those concerns, plus consideration of the territory in which they operated, justifies the conclusion that a majority of those that have fallen by the wayside can be spared very properly without, in any way, affecting either the present or future fortunes of the electrical wholesaling industry nor the ability of remaining wholesalers to render all the required service in every territory.

Based upon the observations gained from continuous intimate contact with the field and with those opinions reinforced by a recent seven thousand mile swing around this country, this writer believes that electrical wholesalers have "won their spurs" insofar as their position in our war effort is concerned. At the same time, they have definitely consolidated their position as an economic necessity in that they are continuing to perform functions which no other agency, private or governmental, has been able to perform as efficiently and speedily at such low cost.

It must be acknowledged that for duration of the war the entire electrical wholesaling industry must expect to remain trimmed down for action with all fancy flourishes and superfluous activities reduced to the absolute minimum. However, that period may well be considered a low price to pay for the prospects that loom after the war is won.

POST WAR

In a war that embraces the globe and involves fighting on many fronts and in many different countries no one dares venture a prediction as to when the war may end. Yet, this writer in the course of the last four weeks has talked to a number of individuals, most of whom rank high in the esteem of the public, and from those contacts it would appear that the war on the European front may well end in 1943. In any event, the war will end sometime and the prospects that await the alert electrical wholesaler after the war is won actually stagger the imagination.

One expert in matters of this kind has called the post war period one that will go down in history as the greatest boom and something equal to an industrial revolution. The electrical industry and the leading manufacturers have today enough new products engineered and perfected ready to go into production to create what will amount to an entirely new front of selling.

Electrical wholesalers, after the end of the war, will have more new products to sell than they can possibly dream of today. Residential building of the permanent type, which has never caught up with needs since the depression of the early 1930's, will come into its own and produce a building boom of the type in which every electrical contractor and every wholesaler large or small will share handsomely. New electrical appliances, new radios, new electronic devices will await distribution through electrical wholesaler channels and provide opportunities for highly satisfactory sales volume.

Last but not least, the various measures taken by the government to prevent inflation, such as defense and war bond sales, victory loan deductions from pay rolls, etc., will have piled up to the credit of the consuming public a backlog of buying power such as neither this nor any other country has ever seen.

Thus, it appears that electrical wholesalers not only are firmly entrenched during the war effort, but for those who will prepare now and build the right kind of a foundation, there will come a post war era the greatest spirit of prosperity that they have ever seen.

LOOKING AHEAD TO 1943 AND BEYOND—

1943—Lighting's Most Important Year

SUPPOSE you were a member of a local draft board. It's Monday night at 11:00 o'clock—and you all still have a lot more work to do before you can go home.

Suppose at the moment you are considering whether a certain draft registrant should be reclassified—upon the evidence submitted—from 3-A to 3-B. In other words, you are trying to make up your mind if this registrant is in an important war industry or service.

And suppose further that the registrant in question has given as his occupation—jobber salesman. And the evidence he has submitted for reclassification deals with the fact that this particular jobber salesman spends all of his time contacting war industries — helping make layouts and supplying the lighting changes needed in order to remove lighting bottlenecks — thus increasing production.

Yes, I know this is not the procedure which is used by a draft board—but suppose it was. Would you, as a member of the draft board, decide that this particular jobber salesman was serving his country better by continuing his work with war plants on lighting than by being inducted into the armed forces? Or, to put it another way—leaving out the question of the draft board—do you feel in your own heart, as a jobber salesman, that you are contributing more to end the war sooner in your present job — or would you feel better about the whole thing if you were in uniform?

Whether you are too old to be drafted—or whether you are in the draft age and eventually will go into service—isn't the important thing to take a look at the job you are now doing, and see whether you are merely using that job to make a living — for present and postwar advantages — or whether you are also using that job to render a daily service to your country? Here are some facts you will want to consider:

1. Before 1943 is over, over 20 million people will be at work in war plants—on a two- and three-shift basis of operation.
2. By far the majority of these war workers are "green" hands or workers with only months of experience on the job.
3. Any device or plan which increases the efficiency of these workers, both experienced and inexperienced, is of tremendous value.
4. Lighting is the one production-increasing tool which can be used by any and every war plant, large or small.
5. You have the knowledge to recognize the lighting faults which are holding back production — and eradicate them.
6. If the lighting industry could correct the lighting in all war plants —for all war workers—the production increase would amount to over one billion man hours per year.
7. This billion man hours is equivalent of those hours required to build 10,000 additional four-engine bombers.

Are There Any Opportunities Left?

One jobber salesman with whom I talked recently—and who has been doing an excellent job on lighting in war plants—had almost come to the conclusion that, as important as lighting was and is, most of the job has been done. He knew that in 1943 there would probably not be any monumental new installations, and he envisioned the coming year

Good lighting helps workers to move with confidence and assurance between the machines, reduces possibilities of accidents and speeds up overall production.

as a very lean one indeed.

When you look at the great volume of lighting business which was done in 1942 you can hardly blame anyone for believing that American industry has absorbed all the lighting possible to be used. And yet in 1942 the bulk of the lighting fixtures sold were for new plants. The relighting job in those plants which are now going over to two- and three-shift operation has really just gotten under way. Let's take a look at 1943.

Business Prospects for 1943

Commercial and industrial lighting equipment volume for 1943 is estimated at about 60 percent of 1942—measured in terms of gross—not profit. This doesn't mean that 1943 will be a poor year—quite the opposite. Compared with any other year except 1942, 1943 will be an exceptionally good year. About three million fluorescent fixtures should be installed — comparing in volume with 1941.

And all this business will be under priority for war projects and plants —because no other sales will be possible. Therefore, all this equipment which will be distributed in 1943 is judged as necessary for the war effort. About half of this business will come from new but smaller construction — the other half, relighting of present plants. The number of fixtures installed for the relighting of old plants will grow in volume as increasing numbers of the personnel in the lighting industry spend their time rendering service to plants that need relighting—as well as spend their time bidding fixture jobs on new plant construction.

Critical Materials

The lighting industry has done a magnificent job in greatly decreasing or eliminating the use of critical materials — without making appreciable decreases in quality. Most notable has been the reduction in the metal content of industrial lighting fixtures for fluorescent lamps. With the inevitable swing to non-metallic reflectors, the total saving per fixture, on the part of the fixture

By H. Freeman Barnes*

affected, has been 10½ pounds. On the projected volume for 1943, this indicates a saving in steel alone of 30,000,000 pounds.

However, as near as can be ascertained, the lighting results of the late 1942 and 1943 fluorescent fixtures—using a minimum of critical materials—will be about equal to the all-metal fixtures which preceded them.

On fluorescent lamps and incandescent lamps notable savings have also been made in the use of critical materials. Comparing 1941 with estimates for 1943, the amount of brass used will be down approximately 80 percent. In 1943 the industry will only use about 12 percent of the 1941 amount of copper —in 1943 only 70,000 pounds of tin against 310,000 in 1941. And such items as lead, nickel, nickel alloys, aluminum, etc., will be only a fraction of their former volume.

Fluorescent Lamps for 1943

In 1941 the country's volume of fluorescent lamps was 21 million. In 1942 approximately 35 million. Volume in 1943 should be ahead of 1942, due to the number of new installations plus the increased volume of renewals from war plants, particularly. At the present time, however, it is impossible to forecast with certainty the 1943 volume.

1943—A Year of Opportunity

I wouldn't blame anyone who deduced, in view of priorities, shortages, need for conservation of critical materials, and all sorts of rules and regulations, that 1943 is going to be a tough year in the lighting business.

And whoever deduced that would be right. 1943 is going to be a tough year for everyone, either in the armed forces, in industry, or at home. But the tougher it is, the greater the opportunity for doing a job. If you want to measure 1943 only in terms of dollar volume, it is going to be a good year — even though a tough one. If you want to measure it in terms of opportunity for service, it is going to be the best year—although still a tough one.

1943—Lighting's Most Important Year

In 1943 lighting will be called upon to do the biggest job it has ever had to shoulder. It will be at war —totally at war. It will be called upon to serve wherever its service is needed—in homes, in stores, in offices, on streets, in schools, in shipyards, on trains, trucks, and in war factories.

It will be called upon to protect eyes, to save energy, to save lives, to prevent accidents, and to increase production. It will be asked to do all these things with the least use of critical materials; it will be asked to go easy where light is not a prime necessity; and it will be asked to jump in with both feet where it is a major factor in helping win the war.

And the lighting industry is ready and working. It has been working hard ever since Pearl Harbor—and before. It will work harder and longer in 1943. It will ask less and give more.

And the men in the lighting industry will turn every man hour at their disposal toward one goal—"using light to help win the war."

* *Manager, Sales Promotion Dept., General Electric Co., Nela Park*

LIGHTING—

WHAT have we accomplished and what will present day accomplishments do for us in the days to come?

Looking back over the past year and the several preceding years, we may well be proud of the progress which has been made by our industry. During the past three years, lighting practice has advanced further than in the preceding decade.

A survey of industrial plants made just prior to the outbreak of the war showed that the average illumination in manufacturing plants throughout the country was less than eight footcandles, and apparently they were satisfied with it.

Today, plant managers realize that low level lighting is a production bottleneck. As a result 50 footcandles of well designed, comfortable lighting is accepted as necessary to provide the "see-ability" needed to keep war production rolling along.

I believe that this new and almost universal acceptance of the value of good lighting is the most, important accomplishment of the present and that it will have more effect on both the immediate and future development of our industry than anything since the advent of fluorescent lighting. When the war is won and industry turns to peacetime developments, there will be no slipping back to prewar lighting levels. Good lighting and the need for greater "see-ability" will be a proven fact and from this point we can swiftly and profitably move in to bring every plant up to these accepted standards. Think what this means in terms of potential sales.

There are still thousands of "non-war" plants which have not been able to get the necessary priorities to enable them to revamp their lighting. But when the war is over and materials are plentiful they will be ready prospects for fixtures, lamps and wiring.

In the field of commercial lighting the post-war prospects are even brighter. Today many stores are limping along with totally inadequate lighting, obsolete types of fixtures and improvised lighting arrangements of all sorts. When the war is over the natural increase of competition, the desire to renovate and the sheer necessity of self improvement will create an unprecedented boom in store lighting. New and more practical fixtures will make their appearance and lighting, such as, built in lighting, cove lighting and spectacular decorative effects will be the accepted rather than the unusual.

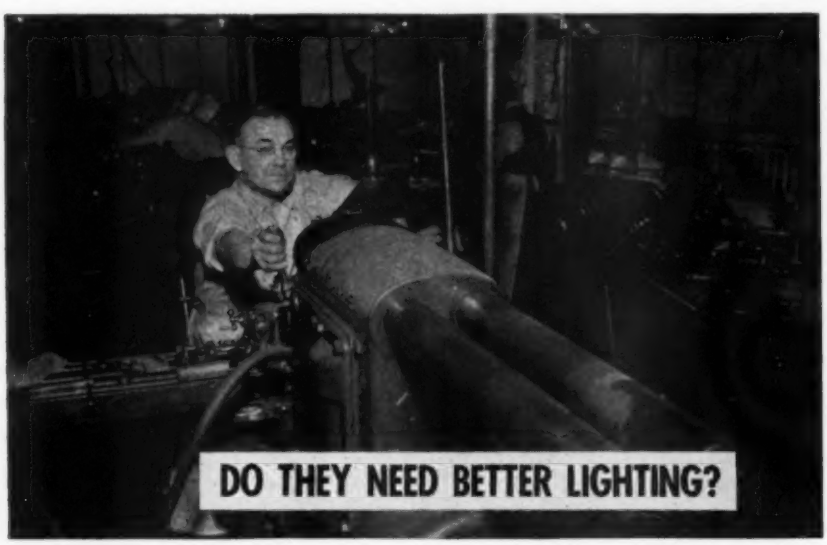
The hundreds of stores which have been closed and then reopened will constitute an entirely new market for all types of lighting equipment.

Engineers have estimated that the cost of fixtures, lamps and wiring for a 50 foot candle fluorescent installation is six times the cost of lamps and wiring that were required for the installations which today are giving 10 foot candles or less.

In using 50 footcandles as the criterion for future installations, we may be greatly underestimating the potential. Fifty footcandles is selected because it is a practical, attainable level using present day equipment. But tomorrow we will have better, more efficient lamps. Since 1939 the light output of fluorescent lamps has been increased 50 percent. I think we can depend upon the ingenuity of the scientific minds working in our research laboratories to bring forth equally spectacular improvements in the future.

Based on surveys of existing lighting conditions and our knowledge of what can and should be provided, we can venture an estimate of the saturation of light and the lighting market that lies ahead.

Assuming that an average illumination of 50 footcandles, which our war industries and more progressive establishments are now using, is a practical economical level, and knowing that the national average is less than 10 footcandles today, we will find the post-war era starting with installed equipment supplying only 20 percent as much light as good practice justifies. If, on the other hand, we were to consider 300 footcandles as a desirable objective, the state of saturation today would represent little more than three percent of what should be provided for good vision and the conservation of eyesight. Obviously there remains for the wholesalers of the country a big opportunity for bigger and better business and the privilege of helping to make the world a better, safer



Modern lighting would help speed up the production of parts for shell machines in this entire shop, would improve quality and reduce spoilage. (OEM Photo)

Still the No. 1 Opportunity

By B. H. Sullivan*

and more comfortable place in which to live.

Residential lighting is another field which should not be overlooked when we think of the future. Today we are living on rationed light. To conserve power and light we are huddling together under one light, we turn off lights which were used for decorative effects and we use the lamps we have because new ones are not available. All of these things are necessary and right for today. But tomorrow people are going to be hungry for more light. They will want to forget the gloom of war days and the psychological effect of light will be reflected in lighter, brighter homes.

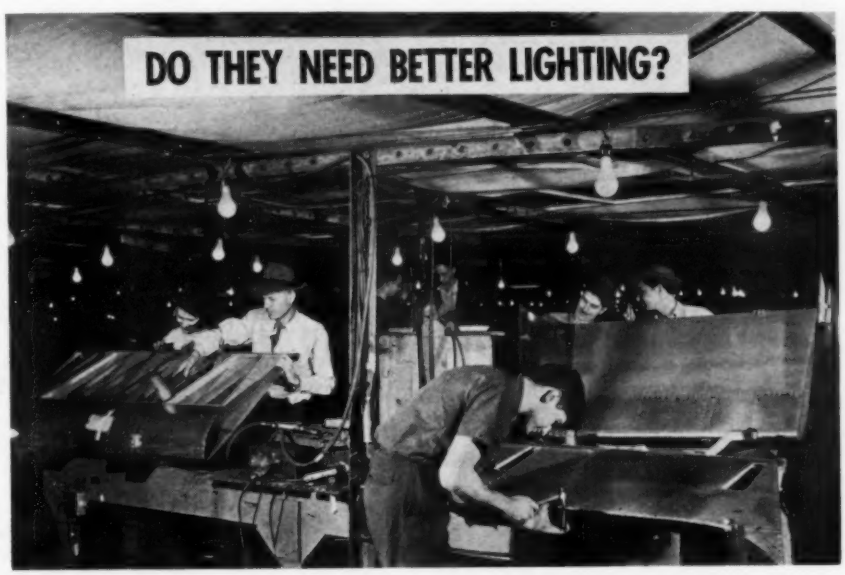
All other fields of lighting will experience a similar revival. Streets and highways will have to be relighted. This will involve the sale of millions of dollars worth of lighting equipment, but will result in the saving of thousands of human lives every year. In schools, offices and public buildings more "see-ability" will be demanded and the lighting industry will be working overtime to catch up accumulated orders.

That is the story of the future, of post-war conditions. But what about today? We are still at war and no one knows how long it may last.

Fortunately, we can keep in condition by continuing to sell lighting. Of course, sales will be restricted, no commercial lighting, no street or highway lighting and no unnecessary industrial lighting. But, despite these limitations there is still a tremendous market for lighting and lamps which must be supplied if the entire war effort is to be kept going.

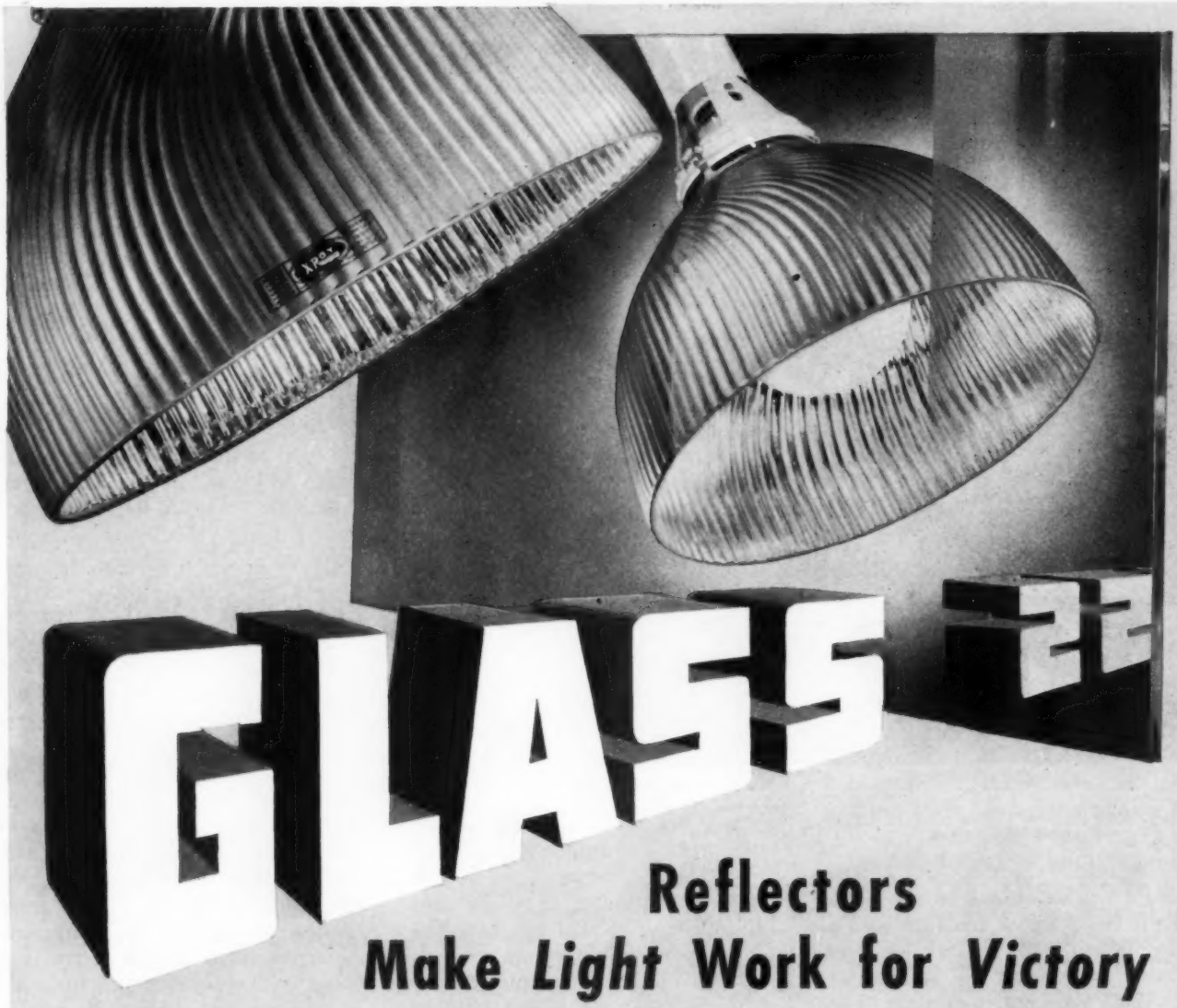
The government recognizes this fact. W.P.B. in its booklet "Plant Efficiency" frankly lists improved lighting as one of the important things which war plants should consider when trying to step up production. Further recognition of the importance of good lighting is shown by the fact that a special priority procedure has been set up whereby priority assistance is given to war plants requiring more light. The task of supplying lamps to keep existing installations lighted is a tremendous one.

We estimate that during 1943, the replacement lamp market for industrial uses alone will be in excess of 400 million lamps. In addition, homes cannot be deprived of necessary light and stores and offices must continue to function. So in the overall replacement market there is a going business which will maintain wholesalers and dealers interest in lighting and keep their hand in the business until the new and greater market is ready.



Proper lighting would eliminate the glare from aluminum wing flaps manufactured in this former ship repair shop, provide better illumination throughout. (OEM Photo)

* *General Sales Manager, Westinghouse Lamp Division*



Reflectors Make *Light* Work for *Victory*

Scientifically controlled lighting with "X-Ray" Silver Mirror Reflectors speeds up production

Less critical materials

Available now

Superior in efficiency

Low maintenance cost

Moderate first cost

Long life

"X-RAY" Reflectors for industrial lighting are made of materials readily available now. They are practical, economical and trouble-free. Silver Mirror Glass is the most efficient reflecting surface used commercially. "X-Ray" Silver Mirror Reflectors are manufactured by the pioneer firm of lighting engineers whose background in the production of Silver Glass Reflectors extends over 45 active years.

A complete line of glass reflectors is available for standard incandescent lamps from 100- to 1500-watts, and also for the 400-watt Mercury Vapor lamp. The larger reflectors are designed for general high and low bay lighting, with smaller sizes for restricted areas such as shops, drafting rooms, and laboratories.

The Curtis representative located in a principal city near you is ready to help you with your lighting problems. For further information call or write him, or send your inquiry direct to the address below.

CURTIS LIGHTING, INC.

6135 WEST 65TH STREET · CHICAGO, ILLINOIS

Six Slants on 1943 Selling By Six Jobbers' Salesmen

As told to Henry W. Young

I See a Lesson In Every Selling Job

By Milo L. Tally

ON one job involving the erection of additional manufacturing facilities for one of the war plants in this area, we have to date supplied electrical equipment manufactured by 22 different companies.

A large amount of this material has been shipped direct from our stock while other items have been routed through for fastest possible delivery. The ability of our company to get those many different

products on the job for war production has saved many days and weeks of delay that would have been encountered if there had not been an electrical wholesaler.

One particular job called for transformer capacity of approximately ..... kva, 700 lighting fixtures, 250,000 feet of wire, 60,000 feet of conduit and 300 safety switches, to mention in round figures a few of the items. Despite many difficulties this entire job is to be completed six months after breaking ground. When one realizes that this equipment had to be ordered, delivered and installed in this length of time it becomes apparent that close contact must be maintained with the job itself in order to expedite deliveries.

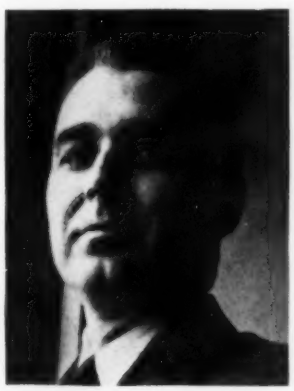
Every job teaches its lesson to the wholesaler's salesman. The lesson gleaned by the writer in this case is simply this: "Keep constant contact with the erection and installation schedule and follow purchase orders so that equipment will arrive prior to the date needed. In case a shipment is held up, notify the contractor immediately so he may synchronize his working schedule with probable deliveries of materials, thus avoiding costly delays.

Introducing New Products

By Earl B. Stearns

The wholesale house I sell for has introduced to the Pacific Northwest war industries a new process known as "Thermacoting." It has been of so much help here that perhaps it will find many applications elsewhere. At this time, it is particularly desirable that the wholesaler be on the alert for these new things and find applications for them.

"Thermacoting" makes possible particularly large saving in connection with the following types of applications:



1. Electric lamp illumination for welders.

Ordinary incandescent lamps soon become covered with "weld spatter" and after a short time become useless as a source of light. This condition causes great expense for bulbs, and also means a reduction of production through lost time in replacing bulbs and through inefficient lighting.

Thermacoted incandescent lamps, which are ordinary incandescent lamps coated with a clear plastic coating, have overcome weld spatter conditions because of the following characteristics.

(a) This coating absorbs less

The Wholesaler *is essential* to the American Economy.....

If proof were needed, the present emergency furnishes it. Time and again, as has been reported in the pages of this publication, the Electrical Wholesalers have "saved thousands of man hours—sped production—prevented delays." . . . From their stocks, and through their familiarity with sources of supply, they have been able to make deliveries to war plants, of vital equipment and parts which have saved immeasurably in time—in transportation—in paper work—and in money.

We have been privileged to cooperate in this National effort. Through this close Wholesaler-Manufacturer relationship we shall all be better prepared to meet and solve the post-war problems, as they affect the electrical construction industry.

EST. 1891
THE SIGN OF A FA BETTER JOB
Frank Adam
ELECTRICAL PRODUCTS
for War Industry
FRANK ADAM ELECTRIC CO.
ST. LOUIS, MO. U.S.A.

(FA) Electrical Equipment includes: Busduct, Wire and Cable Duct, Service Equipment, Panelboards, Switchboards, Safety Switches, Knife Switches, Floor Boxes, Fan Hanger Outlets, and related equipment.

than 2 percent of the light.

(b) Thermacote has perfect adhesion to glass.

(c) Hot metal particles such as weld spatter do not adhere to it.

Thermacote has had a thorough test in several San Francisco Bay area shipyards, and has demonstrated that lamps last four to eight times longer with the coating as they do without it and that many man-hours per month are saved by its use.

2. Thermacote very materially increases the hour-life of higher wattage lamps (300 to 1500 watt), when they are subjected to rain, water or the splashing of liquids. This is made possible by the fact that the coating is water resistant and will not fog or mist up.

3. Another use for this product is that of application to the cover glasses of welders' helmets. Welder hood glasses will last 10 to 20 times longer when Thermacoted. A great saving is therefore accomplished in both glass and time cost.

Selling Marine Supplies to Shipyards

By R. T. Puelicher

In most ways the selling of marine supplies to shipyards involves the same technique as the selling of apparatus and supply items. The main difference is found in the fact that most marine electrical fittings are now covered by specific drawings and specifications.

This means that there can be no difference in the same item supplied by two different companies, thereby removing the product selling angle from the picture.

Maritime selling today becomes a matter of selling service. It also forces the salesman to be on his toes regarding the very latest changes in Navy or Maritime specifications. Oftentimes substantial sales can be made by helping a shipyard to solve these problems of specification changes as soon as the changes come through. In order to do this the salesman must be in constant contact with the engineering department of the yard as well as the buying department.

More than ever, today the marine salesman must not only be a good salesman but also a good expediter, buyer and engineer.

Servicing Government Buyers

By A. F. Sheean

Calling on purchasing and engineering departments of government agencies and government contractors is interesting and stimulating. Speed in getting things done is necessary everywhere and as a result the practice calling for formal bidding has declined and has been largely supplanted by open market negotiations and informal bidding.

A salesman can best serve the defense effort by close association and

contact with these same engineering and purchasing departments, by assisting in listing and securing material and supplies that are the most readily obtainable.

The changes that have taken place and are taking place constantly are a real test of the individual's ingenuity, imagination and knowledge or experience. This is but the beginning, however, as shortages of critical material will necessitate further changes in what we are accustomed to call the "commonly accepted standards".

The experience to be gained during this emergency will prove of invaluable assistance to the salesman with foresight enough to profit by it.

We can be sure that the electrical industry will continue to meet this challenge as successfully as it has in the past.

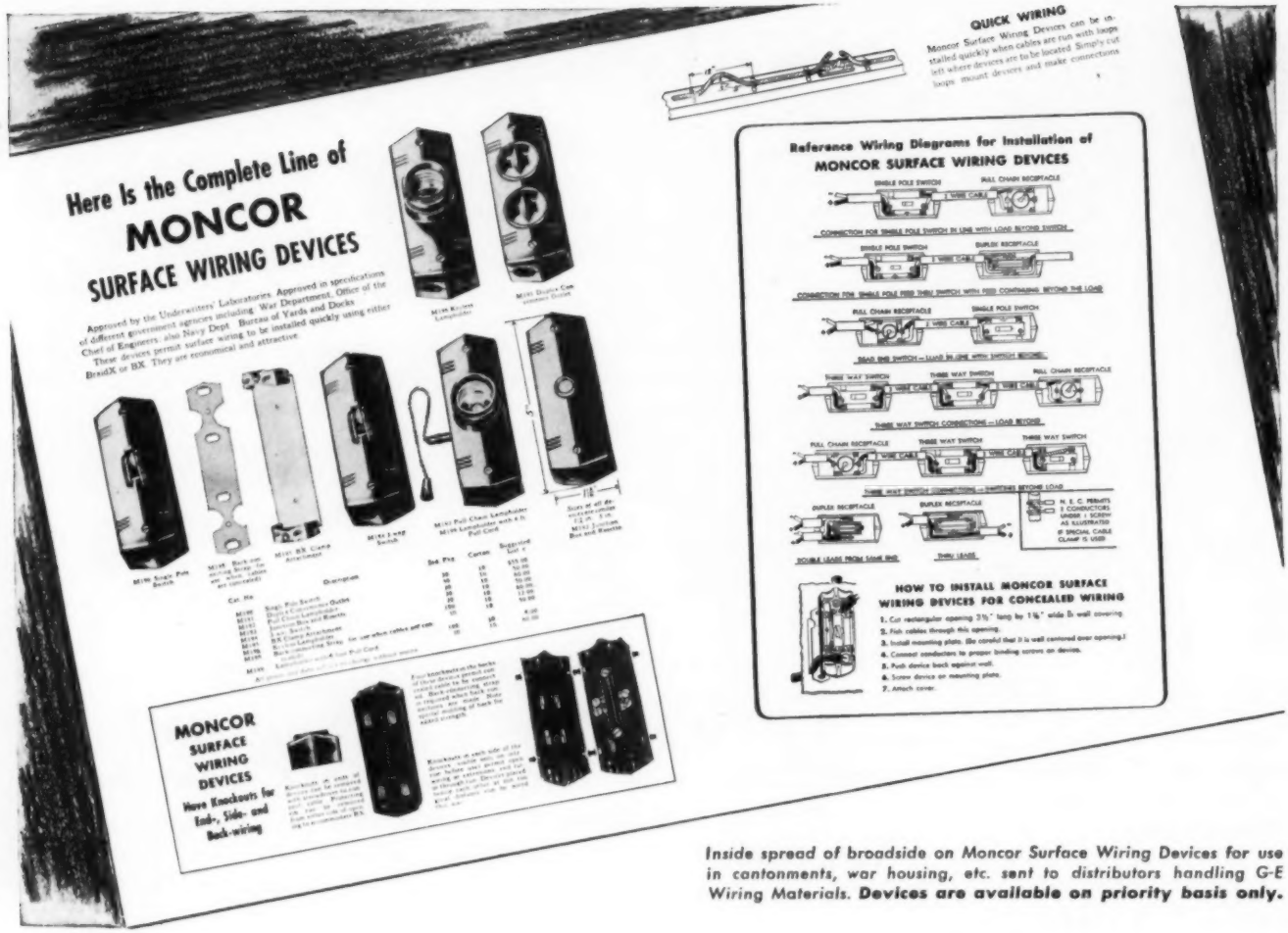
Sell Service and Maintenance

By A. T. Hutchinson

The function of the wholesaler's salesman is essentially the same as it always has been. What we can do and how we do it has, of necessity, changed somewhat to fit the needs of the defense program; we are, however, still selling service.

It has been my privilege to work with the Navy on many and varied demands for rush delivery. Many

of its requirements formerly have been filled only through very limited sources of supply, on standards which are not in common demand. We have been able to materially assist them in finding acceptable commercial equivalents, thereby speeding up the defense program. We are in a position to make available, on


Here Is the Complete Line of
MONCOR
SURFACE WIRING DEVICES
QUICK WIRING
Reference Wiring Diagrams for Installation of
MONCOR SURFACE WIRING DEVICES
HOW TO INSTALL MONCOR SURFACE WIRING DEVICES FOR CONCEALED WIRING
MONCOR SURFACE WIRING DEVICES
Have Knockouts for End-, Side- and Back-wiring

Inside spread of broadside on Moncor Surface Wiring Devices for use in cantonments, war housing, etc. sent to distributors handling G-E Wiring Materials. ***Devices are available on priority basis only.***

General Electric

Provides Moncor Surface Wiring Devices in Co-operating with Distributors to Aid War Effort

Moncor Surface Wiring Devices enable distributor salesmen selling G-E wiring materials to furnish suitable wiring devices for war projects—cantonments, war housing, warehouses, field huts, garages, temporary industrial buildings, etc. These plastic devices meet all requirements on surface wiring jobs with cables concealed or exposed. They can be end-connected or side-connected for surface wiring and back-connected for concealed wiring.

In a broadside sent to distributors selling G-E wiring materials 21 advantages in using these devices are given. Of primary importance is the speed with which they can be wired. The devices have knockouts which can be easily removed with a screw driver to make any device either "feed through" or "end run." The devices are made of brown Textolite, are light and strong, keep their color and resist moisture Either BraidX or BX cable can be used, knob and tube wiring, or cleat wiring.

Moncor Surface Wiring Devices are approved by the Underwriters' Laboratories and by different government agencies. Providing these devices is another way General Electric is co-operating with its distributors in aiding the war effort. The broadside sent to distributors is a miniature catalog, helpful in selling and installation. Wiring Device Section, Appliance and Merchandise Department, General Electric Co., Bridgeport, Connecticut.

GENERAL ELECTRIC

one inquiry, the products of many manufacturers, thereby cutting down their buying time.

Another and very important function of the wholesaler's salesman today is in connection with repair parts. We have been able to furnish parts information, and the parts required to keep valuable equipment in service, much of which otherwise would have gone to the scrap pile. The resultant saving of man-hours and materials is then released to the production of "knock-out drops" for the enemy.

As I see it, the "Elmer Blurp" type of jobbers salesman can take a vacation for the duration, or go to work in the shipyards, but the man who can sell service has a bigger job than ever before.

Saving Materials and Money

By C. W. Hills

The use of higher voltages for sub-distribution around industrial plants found an interesting application in one of the Coast defense industries recently.

One of the contractors doing work for these industrial concerns found that specifications prepared by engineers called for the use of

120/240 volts, 3 wire circuits for lighting and small power loads. In checking with the wholesaler's salesman the contractor found that the sizes of wire called for were not available from local stock, but that smaller wires of the type needed could be had.

In discussing the problem, the contractor and the salesman discovered that here was an ideal opportunity for recommending the application of the small, dry-type transformer with 480 volt primary. The saving in materials and money resulting from this particular application (which is outlined below) was so very impressive that the customer decided to use this same system in several other extensions throughout the plants.

PROBLEM

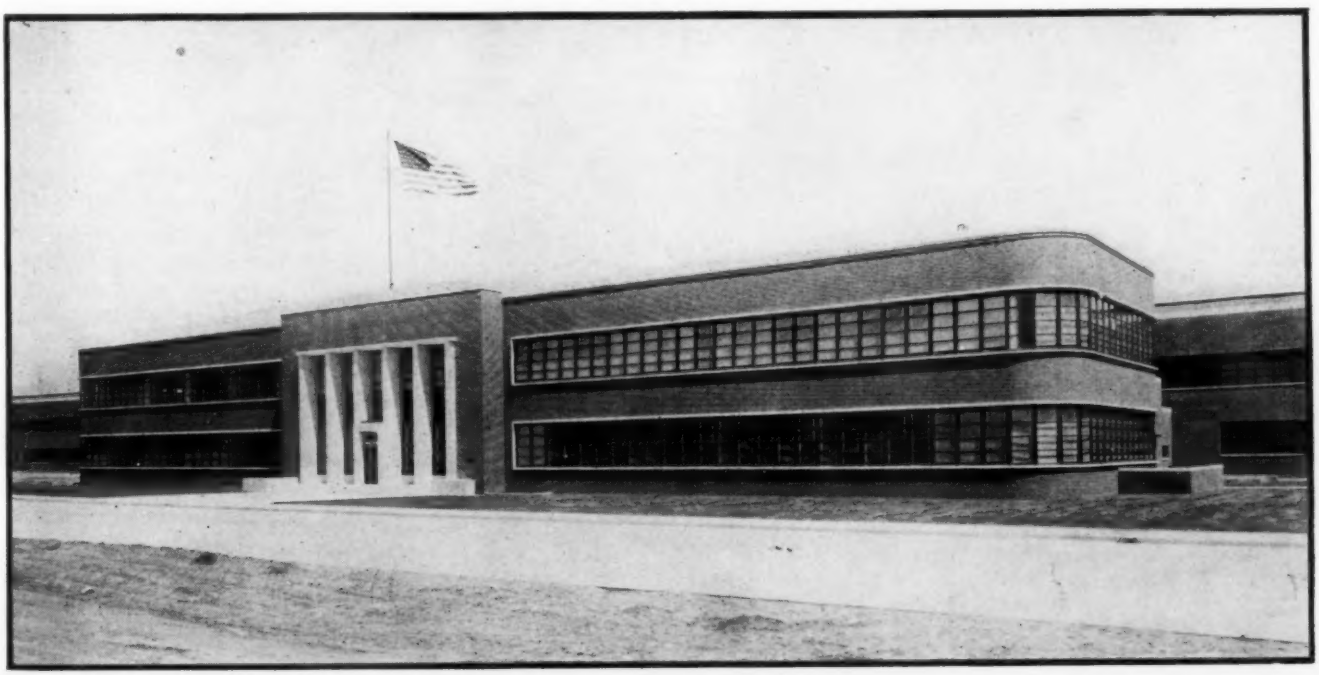
4 1000-watt floodlights to be lighted from a source 1080 ft. distant where both 480 volts and 240 volts were available

Probable cost, as originally laid out with 2 3-wire circuits running to lights

1080′ – 2″ conduit	$314.00
6480′ – 4 RW wire	716.00
	$1030.00

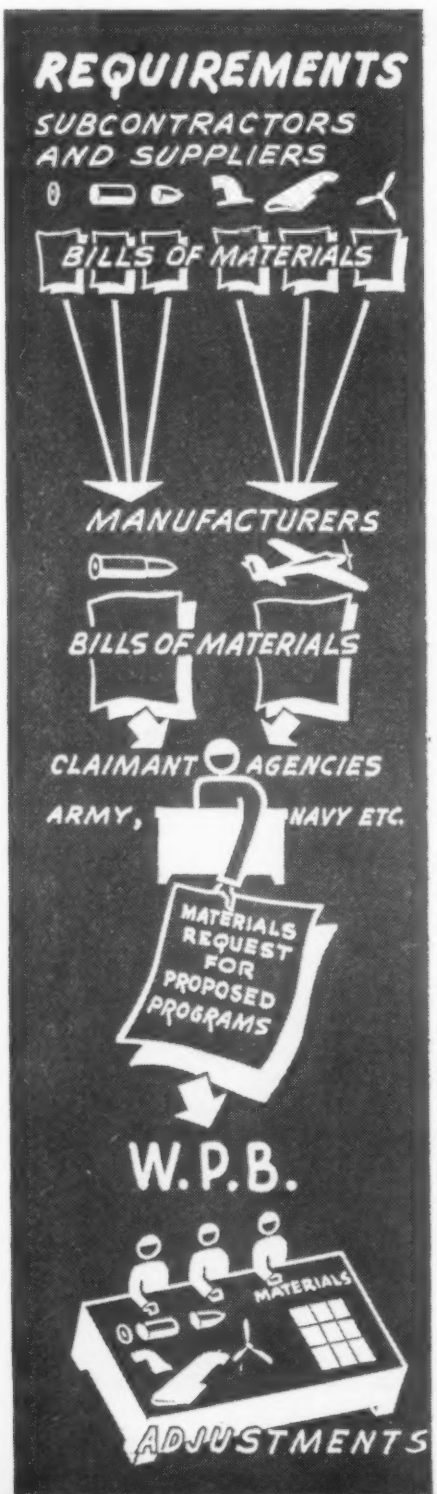
Cost as actually Installed

1080′ – 1″ conduit	$144.00
2160′ – 6 RW wire	181.00
1 – 5kva 480/240 to 240/120 dry-type transformer	54.00
	$379.00



The Controlled Materials Plan

..... A Preview



DURING the next six months, American industry must once more change its operational procedure to fit into a new plan for synchronizing and balancing the nation's war production.

Officially designated as the Controlled Materials Plan, or CMP for short, this plan is expected to achieve by July 1, 1943, a smooth flow of production that will give the country's war effort the largest and most useful quantity of goods possible within the limitations of our available supply of raw materials.

It is important that the wholesaler and the salesman know the basic operation of this plan so that each may do his part in aiding his industrial customers during the transition period. (Unfortunately, because of the newness of the plan, and the fact that details are still being worked out by the WPB, no official interpretation of the wholesaler's part in the operation of the plan is yet available. As soon as it is, WHOLESALER'S SALESMAN will publish such information as may be useful in helping the wholesaler and his salesman operate under the new plan.)

CMP to Control Materials and Schedules

The Controlled Materials Plan is particularly designed to establish a definite and balanced relationship between amounts of materials supplied to various manufacturers within the limits of the raw materials supply.

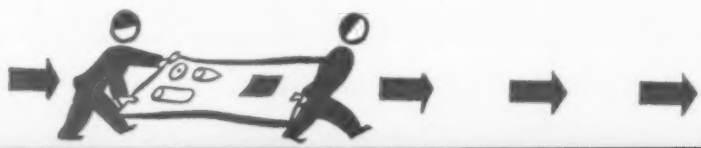
This is to be accomplished through the control which CMP applies to the allocation of three metals —steel, copper and aluminum. WPB believes that if production is controlled in terms of these three metals, the balanced distribution of other critical metals and materials will be made more simple, while at the same time this will permit control of production schedules. Thus, the WPB hopes that this country will be able to produce necessary war goods as well as essential civilian supplies on a smooth production schedule.

How CMP will Operate

The Controlled Materials Plan will attempt to achieve its production goal through the following method of operation:

Individual production programs will be made up for every period by each of the war agencies—Army, Navy, Maritime Commission, Aircraft Scheduling Unit, Lend-Lease, Economic Warfare, and the Office of Civilian Supply. When these agencies have decided what they would like to produce, prime contractors for each product will prepare a "Bill of Materials." This will specify what materials will be needed by the prime contractor and by all his sub-contractors and suppliers. It will include the requirements for not only the controlled materials, but also for the scarce materials for which a priority will be needed.

Each of the agencies will assemble their Bills of Materials and appear before the WPB Requirements Committee to act as a claimant for the raw materials and the production facilities needed.



WPB will compare the total requirements for steel, copper and aluminum with the available supply. Then the proposed programs will be scaled down by the claimant agencies working with WPB's Requirements Committee. When this is done, the supply of controlled materials will be divided into definite allotments for each month for each of the agencies. An allotment will be sufficient to allow completion of the agency's approved program according to schedule.

The next step in the operation of CMP is with the prime contractor. He will receive an allotment number entitling him to a certain quantity of raw materials each month. This will be enough to build his particular product, including all parts that he may sub-contract. He will extend his allotment number to his sub-contractor just as a priority is extended today. The basic difference will be that, under CMP, the sub-contractor will be assured of the materials because it has been set aside for him in the original plan.

Classification of Products

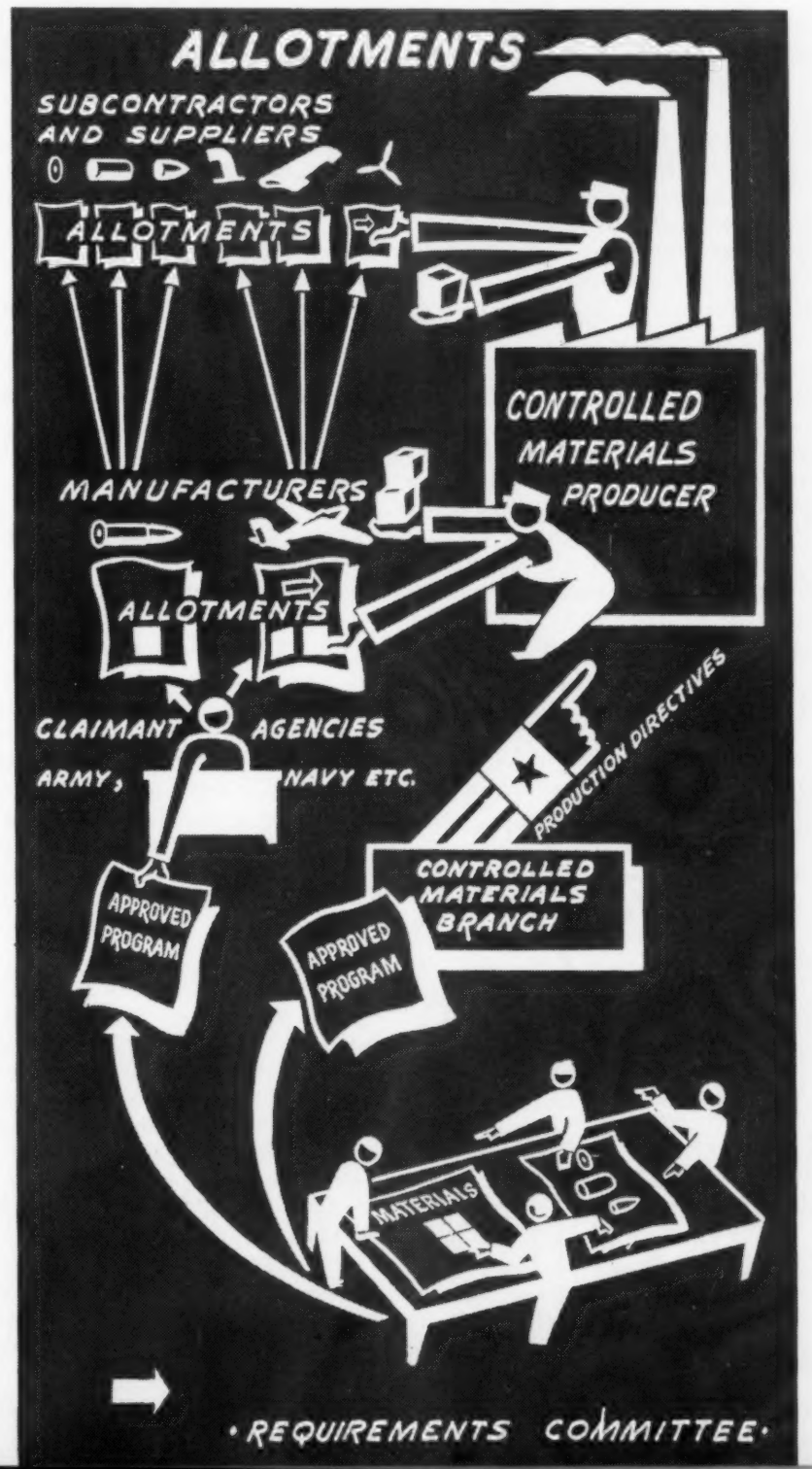
As outlined above, CMP will operate for the production of custom-built military goods. That is the way tanks, guns, ships, etc., will be planned and produced. But for standard items which go into almost every military product — bolts, screws, nuts, bearings, etc., it has been modified.

To handle production of these "stock" items, CMP provides for the starting of a new chain at any level in the basic chain of prime-contractor, sub-contractor, etc. Thus a manufacturer of generators, who receives an order from a tank manufacturer, could act as a prime contractor. He would receive an allotment for steel, copper, etc., from the Army. He could, if necessary, extend this allotment to sub-contractors, permitting them to obtain the controlled materials needed for making up components for these generators.

All the products which may be manufactured by this second chain are classified as Class B products. Within the class are two divisions; (1) those products to be scheduled by the military agencies, and (2) other products, the demand for which will be estimated by WPB.

Materials required for factory or housing construction are kept separate from those needed for production. They will be allocated either to the military agency needing the construction, or to the Office of Civilian Supply, following preview by WPB's Construction and Facilities Bureau. The procedure for using the materials will be the same as outlined for production.

It is reported that it is the intention, under CMP, to keep warehouses operating, to permit ready orders of less than mill-run size. Mills will make deliveries to warehouses without the use of allocation numbers. The warehouse will then be considered as equivalent to a mill, issuing controlled materials according to allotment numbers.



By J. H. Aveling

The Low-Down on Gas and Tires

Gas rationing brings long thoughts on short miles but a recent OPA order brings comfort to the wholesaler's salesman whose car is part of his operating capital

THANK Hitler and the Japs for the fact that, for something over a month now, Americans all over the country have had to think more carefully in terms of miles and gasoline and tires and speed limits than ever before in their footloose lives.

They are waking up to the fact that our national economy runs on rubber, and if it is to *keep* running for the duration, irreplaceable rubber stocks must be guarded zealously, doled out for use where it is most important to our war effort.

It has taken some pretty stiff mental gymnastics suddenly to stop thinking of the family car as a necessary companion on every excursion, and to switch over to viewing the family garage as part of the arsenal of democracy. Yet events since Pearl Harbor have forced just such a reversal upon car owners and users the country over.

For some time to come, the state of a car drivers' coupon book will serve as beginning and end, measuring stick, guide, or what you will, to his travel plans. In a pattern first applied to the eastern states when there wasn't enough for everyone—later to the whole country, every car owner will have a chance to sacrifice some pleasure, comforts and convenience as his contribution toward preserving the rubber upon which we depend so much.

Relief for Salesmen

Reassuring to salesmen whose cars are part of their business equipment, and to whom cuts in their supplies of gas mean much more than mere reduction in pleasure driving, is a recent OPA release announcing a modification of mileage rationing regulations. It reads in part as follows:

"While details are not fully worked out, the change in the mileage rationing regulations will give these salesmen up to 65 percent of their last year's mileage, or a total of 8,600 miles a year, whichever is less. Representatives of traveling salesmen's groups agreed that this mileage is sufficient for essential salesmen's travel.

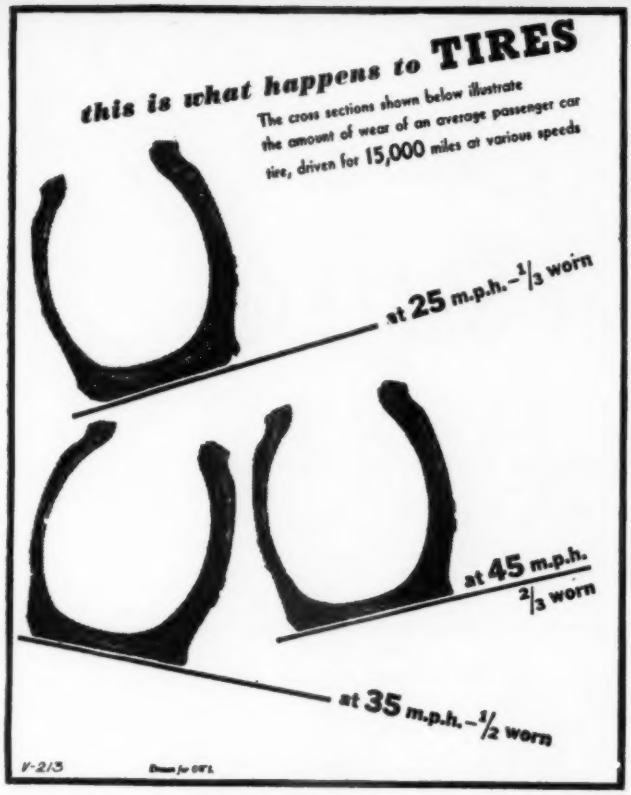
"Salesmen, who will become eligible for more than 470 occupational miles a month, will be limited to those engaged fulltime in the sale of necessary productive equipment for farms, factories, mines, oil wells, lumber camps and similar productive or extractive establishments, or of essential food, shelter, fuel, clothing and medical supplies. Driving in connection with the sale of non-essential commodities will not be increased."

For wholesalers salesmen selling electrical goods to vital war plants, that sounds like good news.

Companion to the reduction in miles travelled, is the national speed limit of 35 miles per hour, for tests have showed that the greater the speed the more rubber used, and any avoidable waste is no part of the plan of the men who are running our war program.

So it is with a welcome chuckle that we read the report of the International Association of Chiefs of Police to the effect that the public is observing the 35-mile-an-hour speed limit "Almost 100 percent," and stop to think of how we, together with other thousands of motorists have slowed from a run to a jog-trot!

And as the motorists of the country "trot" those many less miles on their precious tires, they will do well to consider, in addition, every other possible means for making the five tires which the rationing board has left in their hands last as long as possible. For while, under the national mileage rationing program, all passenger cars are eligible for recapping services or replacement tires the number serviced will be limited by quotas assigned to War Price and Rationing Boards.


this is what happens to TIRES
The cross sections shown below illustrate the amount of wear of an average passenger car tire, driven for 15,000 miles at various speeds
at 25 m.p.h.—1/3 worn
at 45 m.p.h. 2/3 worn
at 35 m.p.h.—1/2 worn
V-2/3

If a local board gets more valid applications than it has in its quota, it will have to choose the most essential demands made upon it. And that still leaves a big question mark as to who and where and how much!

It is, then, still vitally important for every car owner to take all possible precautions. Tire rotation programs have been worked out (Wholesaler's Salesman, March, 1942) designed to distribute wear equally. One of the best, recommends the shift from spare to left front, left front to left rear, left rear to right front, right front to right rear and back to spare again.

But proper care of tires calls for careful and trained inspection as well as the kind of attention that the car owner himself can give, so a periodic inspection of tires is on the schedule. Every four months each tire will be gone over by an approved inspector drawn from the ranks of garage men, tire service men and others who qualify. Local boards have been asked to name competent tire men to handle inspections and their inspection will cover the following ground:

1. Check of ration book and tire inspection record. 2. Listing of serial numbers of all tires on car. 3. Check for correct air pressure in each tire. 4. Recording of speedometer mileage reading on tire inspection record. 5. Check for bent rims and out-of-true wheels. 6. Check for cuts or breaks in tire sidewalls and treads. 7. Check general condition of tires for cuts, breaks, and evidences of wear from badly aligned wheels, faulty brakes, unbalanced wheels, camber malalignment and excessive wear of kingpins, bushings, and wheel bearings. 8. Obtain information from driver as to whether any tire has been injured inside and not repaired.

If tires get by this specific going over, the inspector signs the inspection record, and the car may continue in operation. Where visual inspection reveals probable serious tire ailments, inspectors will require removal of the casings for closer scrutiny, and will prescribe necessary repairs before inspection approval may be secured.

A fee for this service may be charged not to exceed 25 cents for each passenger vehicle when it is unnecessary to remove any tires, while OPA estimates that each inspection will take about fifteen minutes, a small cost in both time and money when figured in terms of extended tire life.—And the first inspection must be completed before January 31, 1943! Owners of commercial motor vehicles are working to an earlier completion of the inspection, since they cannot operate lawfully after January 15, 1943, without proper endorsement having been placed by an approved tire inspector on the vehicle's Certificate of War Necessity.

If it develops that new tires are needed, it is well to remember that all passenger cars are eligible for recapping services or replacement tires. However the use to which the car is put influences the tire which its owner may buy. In all cases recapping is the first recourse. Where recapping is out, a new tire is in order. (Always provided that the local allotment covers local needs).

Car owners whose gas allowance is 560 miles a month or less, may buy a Grade III tire (used tires, recapped tires, new tires of reclaimed rubber.) Those whose gas allotment is for more than 560 miles but less than 1,000 may buy a Grade II tire (those with a retail list price no higher than 85 percent of standard Grade I casings, damaged new tires "changeover" tires, "factory seconds" and all new tires made before January 1, 1938.) Car owners who can drive more than 1,000 miles a month may buy Grade I tires.

It's a big job they've taken on, this business of seeing to it that we have tires for our cars—and it's *worth* doing a big job so that our armies everywhere will have the equipment they need to finish up quickly and get back home.

Be On the Alert For Sabotage

Authoritative anti-sabotage information that wholesalers can use themselves, and pass on to their industrial customers.

OVER two years before fanatical Japanese morons relegated their country to suicide by their heinous acts of treachery at Pearl Harbor, a farsighted President designated the Federal Bureau of Investigation as the coordinating agency in all investigations of espionage, sabotage, and related National Defense matters. That was in the early summer of 1939.

On September 6, 1939, the President went even further to insure avoidance of the confusion which existed during the first World War by issuing a formal directive calling upon all law enforcement agencies to cooperate with the FBI in this vital work by referring to it all information coming to their attention indicating possible violations of the National Security Statutes.

FBI Wastes No Time

The FBI acted immediately upon the President's directive by setting into motion on a nation-wide basis the FBI Law Enforcement Officer's Mobilization Plan for National Defense, thus mobilizing the more than 150,000 police officers of the United States into a solid phalanx of unity poised for action.

In the fall of 1939, the Army and Navy realized the potential possibilities of saboteurs destroying manufacturing plants handling defense products, or crippling such plants to the extent that it would cause a slow-down in production. Therefore, the Army and Navy requested the FBI to go into these plants and conduct the necessary physical surveys and investigations and make the necessary recommendations to plant managers as to what they might do to better protect their plants from enemy agents.

From the fall of 1939, until January 1942, more than 2,300 plants handling defense contracts of the Army or Navy were investigated, and recommendations concerning them were made by the FBI as suggested by the Army and the Navy.

Largely as a result of the FBI's plant survey program, American industry as a whole has been made sabotage conscious.

Pearl Harbor Signal for Intensive Drive

December 7, 1941, found the FBI and local law enforcement prepared. Within a few hours after the attack on Pearl Harbor, Special Agents of the FBI, cooperating with local and State police officers, arrested more than 1,400 alien enemies throughout the country. At the present time approximately 12,000 alien enemies have been placed under arrest.

Since the outbreak of the present war, three major spy rings and several less important individuals have been exposed, and 56 persons have been convicted of espionage activities or failure to register as foreign agents.

Since December 7, 1941, several thousand cases involving sabotage and suspected sabotage have been investigated by the FBI. A total of 218 persons were convicted of sabotage during the fiscal year ending June 30, 1942.

Continually since 1939, the FBI has sought and obtained the cooperation of private citizens, business organizations, and law enforcement officers in an effort to ferret out the termites in America who seek to destroy our democratic way of life. Those despicable termites know, just as well as we know, that warehouses, stores, and farming areas in the remote sections of our country are definitely military objectives, just as much so as our airplane factories and shipyards in the more urban communities.

Every Business Man Is Concerned

A warehouse of food in America destroyed by the enemy is just as potent in delaying victory as a food train destroyed on a foreign front. It is just as essential to protect our stores and warehouses as it is to protect our convoys and supply trains. If the food is destroyed here at its source, there will be no convoys or supply trains for our troops fighting on foreign soil.

Continual vigilance is necessary to safeguard America's food supply from sabotage.

Managers Believe "It Can't Happen Here"

The FBI found during the course of its plant surveys that too many plant managers failed to realize the value of adequate plant protection. Too many plant managers took it for granted that no enemy would "dare" to attempt sabotage at

By J. Edgar Hoover

Director,
Federal Bureau of Investigation,
U. S. Department of Justice

their plant for fear of being caught. Too many plant managers "assumed" their plants were adequately safeguarded. Today we are at war. We cannot assume, we cannot indulge in overconfidence, we cannot overestimate the enemy, externally or internally.

We are dealing with crafty, dangerous, and treacherous killers, who seek to destroy us no matter what the cost. We must be alert. We must be prepared. We must not wait to see where the enemy will strike next and hope it will not be in our own particular locality.

Tips for Your Protection

Widespread sabotage can turn the tide of war. It is your duty to see that the materials and products you handle are not subject to the saboteurs' weapons of fire, poison, and explosives.

Below will be found a few wartime tips based on experience of FBI investigators:

1. Protect your store or warehouse with adequate mechanical devices, such as fire and burglar alarms.

2. See that all fire-fighting apparatus is in good, workable condition.

3. See that your employees are thoroughly acquainted with the location and use of fire-fighting apparatus.

4. Carefully select and investigate the background of your employees.

5. Do not allow strangers to wander around your store, your farm, or your warehouse.

6. Do not investigate suspicious fires or explosions. Report them to the FBI. Sabotage is a Federal crime and should be handled by the FBI.

7. Do not indulge in loose talk.

8. Do not give out information of any kind to inquisitive strangers. Answer their questions with inquiries concerning them.

9. Do not close your eyes and ears to possible dangers. Be alert and report any acts of espionage or sabotage to the FBI.

10. Inspect your own plant to see if it is adequately protected. Do not presume that it is or leave its protection to a minor employee.

This is more than a war. It is a world-struggle of righteousness against evil. The foes of righteousness are not to be underestimated. They are treacherous, sly, sinister, unmerciful, ruthless, wanton, and determined to trample the democracies of the world or die in the attempt. They must die. We must win—but to win—we must produce, we must fight, we must guard against attack, and we must be constantly on the alert.

WHOLESALER'S SALESMAN NEWS

NEMA Organizes New Sections To Meet Industry Needs

Fields of electronics, industrial and commercial lighting, to receive attention from newly organized groups. Max McGraw heads reorganized war projects committee

IN a move to keep its activities closely geared into the changing demands of the war-time electrical industry, the National Electrical Manufacturers Association has organized two new sections, one for the field of electronics and another for industrial and commercial lighting, and also has reorganized its war projects committee.

The electronics section has been formed to work on a program which has the immediate purpose of furthering the maximum use of the electronic force in the production of war weapons and material and in the use of these weapons in actual combat. H. J. Hoffman, chairman of the section and manager of the specialty products division of Westinghouse Electric and Manufacturing Co., states that "Tomorrow, when peace has been won, the power of electronics to build the future world will be realized to the fullest extent of our increasing knowledge."

"With literally tens of thousands of possible applications of electronics in industry, we have the immediate problem of strengthening our war effort, both through the use of electronic devices by our armed forces and in industry generally," Mr. Hoffman said. "As an industry group, we are dealing with a new scientific force having unbelievable power both to destroy and to build. Today, both phases of this power are being widely applied."

Assisting Mr. Hoffman in the electronics section is D. V. Edwards, president of Electrons, Inc., who was appointed vice-chairman.

The problems of better lighting in both manufacturing and service industries to meet war-time demands for increased production, improved products and greater safety and comfort for workers will be studied by the newly organized Industrial and Commercial Lighting Equipment Section of NEMA.

E. C. Huerkamp, chairman of the section stated, "By combining the two sections which had been handling the problems of industrial and commercial lighting into a new section NEMA hopes to develop ways and means of making the 'lighting tool' more easily available and thus provide a better service to industry and to the war production effort."

Mr. Huerkamp is manager of lighting sales for Westinghouse Electric and Manufacturing Co., Cleveland. Vice-chairman of the section is A. F. Wakefield, vice-president of the F. W. Wakefield Brass Co. To assist in the work of the section, Mr. Huerkamp has appointed the following committees: War Projects Committee, with R. W. Staud of Benjamin Electric Mfg. Co. as chairman; Industrial Fluorescent Technical Committee, S. R. Naysmith, The Miller Company, chairman; Industrial Incandescent Technical Committee, H. A. Barnes, Wheeler Reflector Co., chairman; Commercial Fluorescent Technical Committee, W. P. Lowell, Jr., Sylvania Electric Products Inc., chairman; Commercial Incandescent Technical Committee, G. T. Morrow, Curtis Lighting, Inc., chairman; General Technical Committee, A. F. Wakefield, The F. W. Wakefield Brass Co., chairman; Public Information Committee, C. W. McDaniel, Fostoria Pressed Steel Corp., chairman; Products Scope Committee, Arthur Miller, The Miller Company, chairman; Membership Committee, H. E. Ingraham, Holdenline Co., chairman.

NEMA has also announced the reorganization of its War Projects Committee, with Max McGraw, president of McGraw Electric Co., and president of NEMA, as chairman. Added to the committee are C. W. Higbee, manager of wire sales, U. S. Rubber Co., and F. T. Wheeler, vice-president, Trumbull Electric Manufacturing Company. Reappointed to continue on the committee are: Howard E. Blood, Leonard Kebler, F. W. Magin, E. O. Shreve, W. E. Sprackling, A. C. Streamer, and G. C. Thomas.

Wholesaler Training Women as Clerks

H. B. Rogers, branch manager of the General Electric Supply Corp., Spokane, Washington, reported in November that their personnel had been reduced from 26 to 15 in recent months. They are now using women in greater proportion, two having been put on stock cards and on customer order service, having first been trained by a special school course.

The other women are now going to "school" every Friday evening, learning switch gear applications. These school courses take four months and Jack Goggin of the General Electric Co. gives the instructions. They go right through the stock, with handbooks, so that the student employees learn where to find things as well as gain a general knowledge of what they are for. An examination is held at the end of the course.

These women, together with the two now working on stock cards and customer service, have been with the

company a number of years and have had a speaking acquaintance with most phases of the business before beginning this specialized training.

Electrical Manufacturers Show Record War Output

Electrical manufacturers in recent announcements have reported shipment or dollar volume records which reflect continued and generally increased production of war goods.

Allis-Chalmers Manufacturing Co. reported third quarter billings of $55,732,642 and bookings of $55,717,119, which compare with billings of $37,091,112 and bookings of $44,478,497 in the 1941 third quarter.

Vice-president A. C. Streamer of Westinghouse Electric and Manufacturing Co. announced that during the month of October, more than 1,300 carloads of equipment for the armed forces were shipped from the East Pittsburg plant. This was an increase of 5 percent over September.

Stockholders of General Electric Company received a booklet "General Electric Goes to War," in which the company forecast the production of $1 billion dollars of war goods by the company this year.

Gets REA Funds For War Expansion

An allotment of $735,000 to the Jones-Onslow Electric Membership Corporation, Jacksonville, N. C., has been announced by REA. These funds will permit completion of existing facilities and construction of additional facilities for serving of a Marine base and a Naval airbase in accordance with plans outlined by the Navy and approved by WPB.

Contractors' Group Takes Washington Office

The National Electrical Contractors Association has established its headquarters offices at 633 Investment Building, Washington, D. C. Lawrence Davis, general manager of the Association, announced that the increasing need for closer contact and cooperation with the many Federal Government agencies whose activities so directly concern the electrical contracting industry, have made essential this move of NECA headquarters to the capital city.

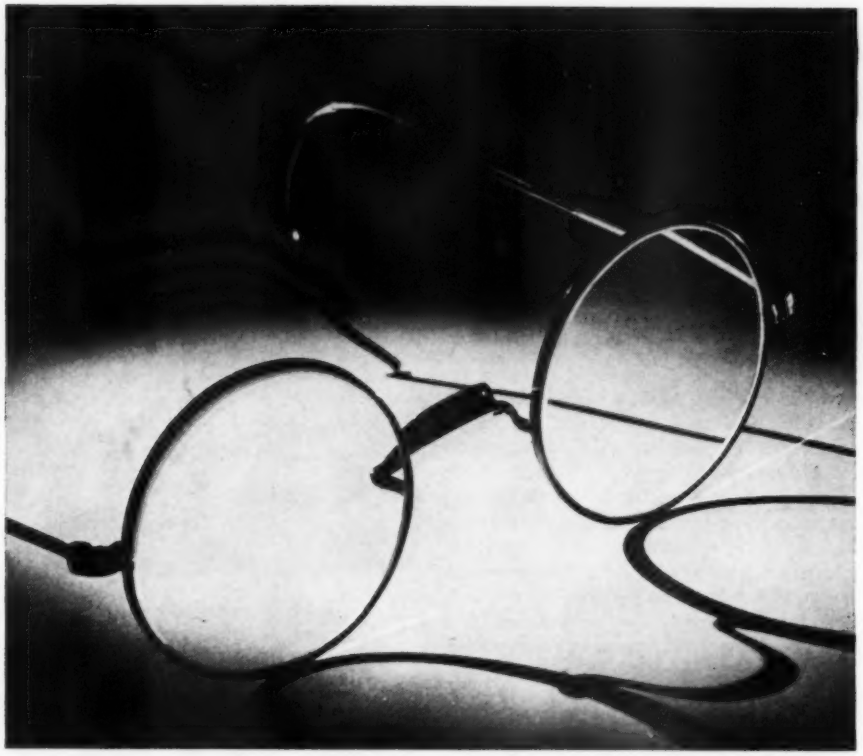
MKB Promotes Post-War Utility Appliance Sales

The first issue of The Modern Kitchen Bureau's "Communique" contains a description of the "Lucky Me—I'm an American" series of advertisements which the MKB is promoting for use by utility advertising departments. The campaign is designed to "prime the post-war market" through suggesting that individuals purchase War Bonds now and earmark them for purchases of electric kitchen equipment when this once more becomes available.

"The Communique" is MKB's title for a wartime news review of activities and a clearing house of ideas for the appliance sales departments of the electric utilities. In a statement release with the first issue of the MKB Communique, Edward Vennard, chairman of the bureau, said that: "During this period of rapidly changing conditions, electric companies are seeking and adopting those operating methods and policies that result in the greatest contribution to the war effort . . . the Modern Kitchen Bureau 'Communique' is designed to meet a need of the times in that it will provide

ROBERT H. BISHOP has been appointed General Sales Manager of the Lighting Division of Sylvania Products Inc., according to an announcement made by Don G. Mitchell, vice-president and director of sales for the company. Bishop was Eastern Sales Manager.

M. C. TARADASH (left), president of Hyland Electrical Supply Co., Chicago, pauses for the WS camera, and then talks with pride about the streamlined office installed there last summer (center photo). At the right are two Hyland vice-presidents, C. H. Weicensang and Sam Rosenthal, who continued working while their picture was taken.



There will be FEWER OF THESE

Eyeglasses symbolize eyestrain. By reducing eyestrain through proper lighting, your war production can be increased both in quantity and quality. Fewer man-hours will be lost, fewer rejects will come off your production lines.

Silv-A-King offers a complete lighting service—fine equipment (either fluorescent or incandescent) plus skillful engineering to lay out your lighting installation for maximum effectiveness. Our ability to serve you well in lighting comes from 21 years of experience as industrial lighting specialists. A Silv-A-King lighting engineer is at your call wherever you are located.

Bright Light Reflector Company, Inc.,
1031 Metropolitan Avenue, Brooklyn, N. Y.

Write for new, 16-page Silv-A-King book:
"Light Is An Essential Production Tool"

A Few Typical Silv-A-King Users:
AC SPARK PLUG
GENERAL MOTORS
FISHER BODY
INTERNATIONAL HARVESTER
JONES & LAUGHLIN STEEL
PITTSBURGH PLATE GLASS
and many others

FLUORESCENT · INCANDESCENT
SILV-A-KING
EQUIPMENT

SILV-A-KING MAKES *Light* WORK FOR YOU

means for a free exchange of ideas in an economical manner."

Included in the first issue are features on appliance service, a nutrition program, news of other companies, and an illustrated article on a window display kit.

Re-elect Hallstrom

The Electrical Association of Philadelphia has re-elected A. L. Hallstrom as president of the Association for 1943. This will be the fifth consecutive one-year term to be served by Mr. Hallstrom, who is vice-president of Graybar Electric Co.

The other officers elected to serve during 1943 are: vice-president, Howard L. Miller, president of the Utilities Engineering Co.; treasurer, Phillip H. Ward, Jr., president of the Ward Electric Company; secretary, Robert J. Moran, chief of electrical department, Middle Department Rating Association.

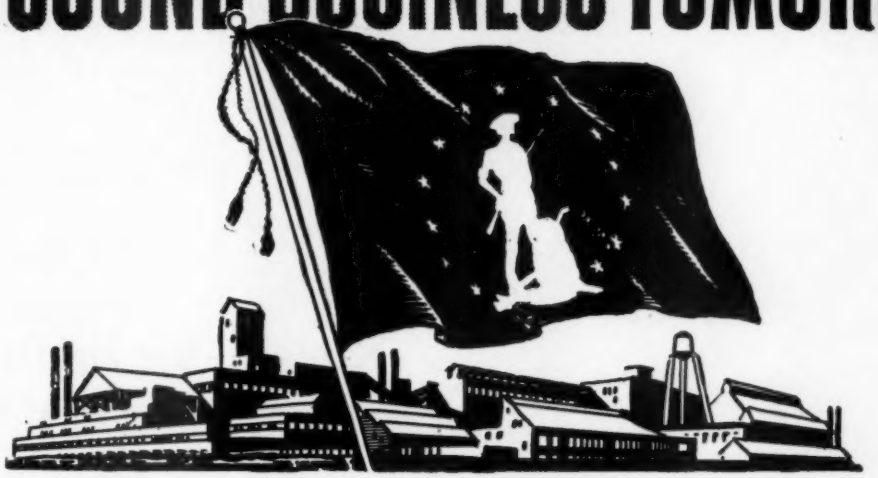
Release Vacuum Cleaners

WPB has authorized wholesalers and retailers to sell to the public any vacuum cleaners they have in stock. The order freed stocks which were frozen October 24 when the government wished to determine the number of units available and the number required for military needs.

Units held by manufacturers, their affiliates and private brand sellers who have more than 500 in stock remain frozen.

W. E. GRAHAM of General Electric Supply, Seattle, found that when his work as Appliance Sales Manager slowed up, other duties crept in to make him busier than ever.

FOR VICTORY TODAY AND SOUND BUSINESS TOMORROW



Get This Flag Flying Now!

This War Savings Flag which flies today over companies, large and small, all across the land means *business.* It means, first, that 10% of the company's gross pay roll is being invested in War Bonds by the workers voluntarily.

It also means that the employees of all these companies are doing their part for Victory . . . by helping to buy the guns, tanks, and planes that America and her allies *must* have to win.

It means that billions of dollars are being diverted from "bidding" for the constantly shrinking stock of goods available, thus putting a brake on inflation. And it means that billions of dollars will be held in readiness for post-war readjustment.

Think what 10% of the national income, saved in War Bonds now, month after month, can buy when the war ends!

For Victory today . . . and prosperity *tomorrow,* keep the War Bond Pay-roll Savings Plan rolling in *your* firm. Get that flag flying now! Your State War Savings Staff Administrator will gladly explain how you may do so.

If your firm has not already installed the Pay-roll Savings Plan, *now is the time to do so.* For full details, plus samples of result-getting literature and promotional helps, write or wire: War Savings Staff, Section F, Treasury Department, 709 Twelfth Street NW., Washington, D. C.

EVERYBODY EVERY PAYDAY AT LEAST 10%

Save With

War Savings Bonds

This Space Is a Contribution to America's All-Out War Program by

WHOLESALER'S SALESMAN

A TRUSTED FRIEND TURNS ENEMY!

YES, light can be man's best friend. But when improperly used, it becomes an insidious enemy which saps his vitality by causing eyestrain and fatigue.

War production, with its demand for greater speed and efficiency, has definitely proved the importance of proper illumination. Not only in adequate light, but in carefully controlling it to eliminate glare, sharp contrasts, shadows and other disturbing factors which work *against* the eyes rather than *for* them.

Better illumination can help you increase much-needed production. Why not ask Goodrich industrial lighting engineers to assist you? The hundreds of styles and sizes of Goodrich fixtures answer every industrial requirement. Write for literature.

Highlite *Stocklite* *Diffuso Floodlight* *Seprable RLM Dome*

GOODRICH RLM

Protecting vital plants with floodlighting — saving man-hours in production —Goodrich industrial fixtures are serving America's war effort everywhere.

LIGHTING FOR INDUSTRY

GOODRICH ELECTRIC COMPANY

OFFICES IN ALL PRINCIPAL CITIES

GENERAL OFFICES AND FACTORY: 4610 BELLE PLAINE AVENUE, CHICAGO, ILL.

SOLD ONLY THROUGH ELECTRICAL WHOLESALERS

Niagara Association Manager Resigns

Samuel S. Vineberg has resigned as manager-secretary of the Electric Association of the Niagara Frontier to become plant engineer of the Morrison Steel Products Corporation in Buffalo. Mr. Vineberg has been with the Electric Association since 1926 and is well known in the electrical trade throughout Western New York. He was the originator of numerous promotional programs in the electrical field which attained national recognition and under his leadership the Electric Association of the Niagara Frontier became one of the most progressive organizations of its kind in the country.

War Lighting Problems Covered at Conference

A special 2-day wartime industrial lighting conference held recently at the GE Institute at Nela Park drew 33 key men representing important U. S. and Canadian war plants.

A wide variety of war lighting subjects were covered in the twenty talks made by GE engineers. Discussion periods followed. Included among the topics were: wartime lighting levels; priorities, non-metallic reflectors; blackout and protective lighting; maintenance problems; and drying lamps. Included among the U.S. warplants represented were: Bell Aircraft, Eastman Kodak, General Motors, Wheeling Steel, Lukas-Harold, Western Electric, and Bausch and Lomb.

SUPPLY SALES MANAGER, F. A. Block, General Electric Supply, Seattle, has taken into his department at least two of the former merchandise salesmen—reports these men can be good supply men with very little training.

NEW SALES MANAGER for outside construction department of Graybar, L. W. Taylor, right, replaces D. C. Guest, left, who retires after 36 years in the electrical business.

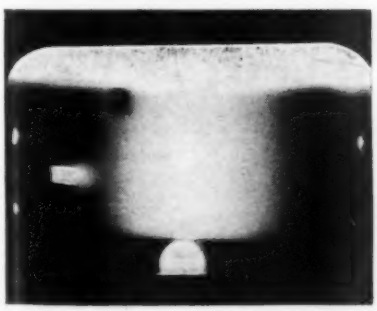
Westinghouse Renames Merchandising Division

J. H. Ashbaugh, manager of the merchandising division of the Westinghouse Electric and Manufacturing Co., has announced a change in name for the division to "the electric appliance division."

He stated that the change has been made because the new name better indicates the manufacturing facilities at both the Mansfield, Ohio, and Springfield, Mass., plants.

Employee Work Record

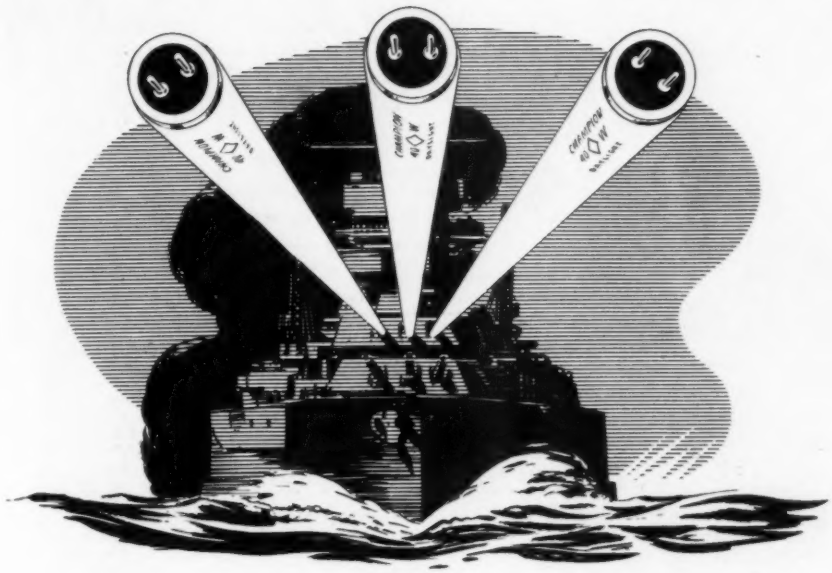
The 150 men and women workers at Reliance Electric and Engineering Company, Cleveland, Ohio, who have not missed a single working day from their jobs for the twelve months since Pearl Harbor, were honored recently at a dinner tendered by the management.



X-RAY of electric motor frames at the Ilg Electric Ventilating Co. plant tells inspectors if the weld of the rolled steel is perfect. This one indicates a perfect weld. Use of the X-Ray for this industrial application may be the forerunner of many more applications and possibly a large post-war market.

You Help Protect the

WAR PRODUCTION PROGRAM



When You Supply

CHAMPION

FLUORESCENT LAMP REPLACEMENTS

It isn't the initial lighting installations—it's the *replacements* that are important to war production *this* year.

Champion Fluorescent Lamps have just what you are looking for—a quality product, essential to your customers' war effort cost—that you can supply in profitable volume.

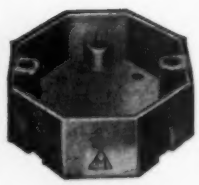
YOU CAN USE this handy new Manual, chock full of practical, helpful information you can use to help your customers make the most of their lamps and lighting. Write for copies of Champion Manual J.

CHAMPION LAMP WORKS

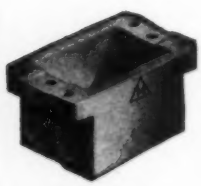
Lynn, Massachusetts

A DIVISION OF CONSOLIDATED ELECTRIC LAMP CO.

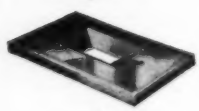
ILLINOIS
Completely Insulated
ALL PORCELAIN WIRING SYSTEMS

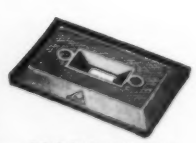


OUTLET BOX AND COVER



SWITCH BOX AND COVER





TOGGLE SWITCH PLATES

Porcelain protected wiring systems are more important than ever before for two reasons:

(1) Porcelain is not a critical material—it is available for immediate uses—its use conserves materials vital to our victory effort.

(2) Porcelain Protected Wiring Systems are advantageous to the contractor and industrial chief electricians because these systems are easy to install, can be installed without grounding, insure high quality results, and are adaptable to practically all wiring plans and layouts. For the customer, porcelain protected wiring systems mean permanency of installation, economy, safety, dependable service where dampness and fire hazards are prevalent.

Another advantage of open wiring in industrial plants is its accessibility for system changes.

You can guarantee Illinois All-Porcelain Wiring on all wiring jobs.

LAMP HOLDERS

STANDARD TUBES

Look for this Trade Mark

STANDARD KNOBS

CLEATS

ILLINOIS ELECTRIC PORCELAIN CO.
MACOMB, ILLINOIS

LLOYD W. JONES, appliance service representative of Graybar in Seattle, has the trunk of his car neatly rigged to carry tools and parts.

Gifford Elected Head of Schick

K. C. Gifford, vice-president in charge of sales and advertising, has been elected president and general manager and a director of Schick Incorporated, Stamford, Conn., manufacturers of electric razors. He was also named president and a director of Schick Service, Inc., operators of service stations for Schick Razors.

In addition to Mr. Gifford, two new directors, Wallace Clark of Washington, D. C., and Paul E. Holden of Palo Alto, Calif., were added to the board of directors.

The facilities of Schick Incorporated are now devoted solely to the manufacture of war materials.

STORES MANAGER for WESCO at Seattle, Wash., is Ralph Sroufe who was supposed to write an article for WHOLESALER'S SALESMAN *on the problems of stores operations under present conditions, but those conditions have him too busy at the moment. He compromised on the picture.*

NELA's Dean Warren Transferred to Buffalo

Dean M. Warren, in charge of technical publicity at General Electric's Nela Park in Cleveland, has been transferred to the Empire Division of the firm's lamp department at Buffalo, according to announcement from the

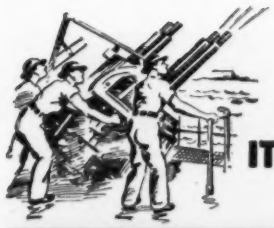
Nela Park headquarters. Warren will devote his full time to wartime lighting of industries in the Buffalo area.

Mr. Warren is widely known as an authority on commercial and industrial lighting. He has been in demand as a speaker on programs sponsored by business and factory groups.

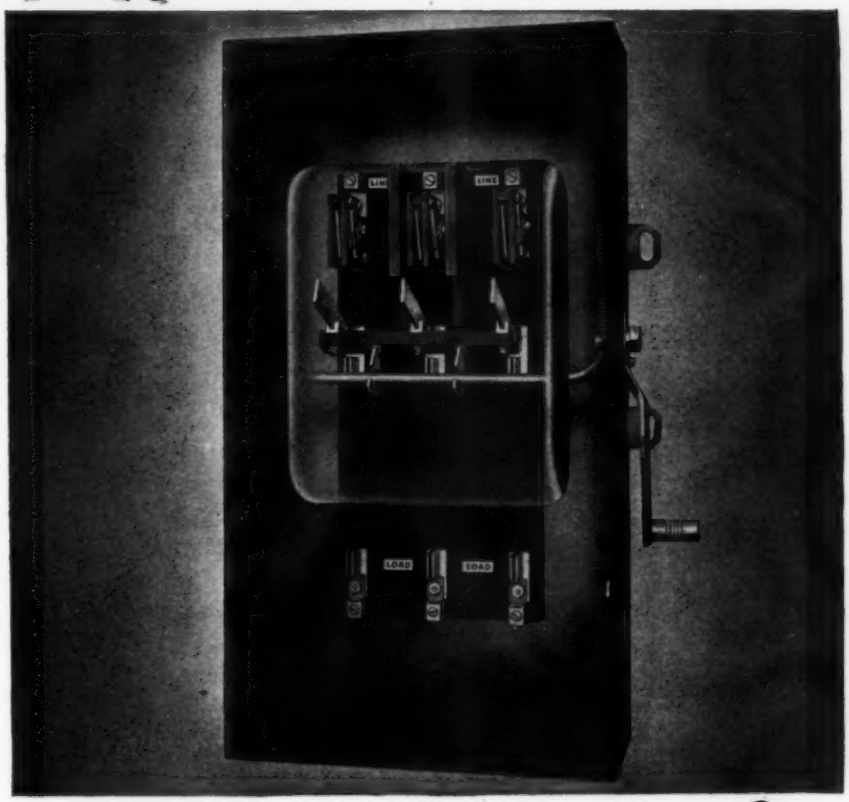
He joined the lamp works of GE at Youngstown, Ohio, in 1926, following a period in survey work for the Pennsylvania Highway Department. He went to Nela Park in 1928 to specialize in illuminating engineering. He has supervised the preparation of hundreds of "how to" feature articles which have been published in the trade press, and many stories which have appeared under his own name.

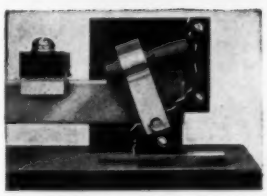
Appointments at Ward Leonard

The Ward Leonard Electric Company has announced that Charles J. Otis now has complete charge of purchases for the company. D. J. Burns, vice-president of Ward Leonard, stated that Mr. Otis' experience in the systemization of purchases led to the appointment. At the same time, Mr. Burns announced that D. R. Guthrie has been made personnel manager of the company.

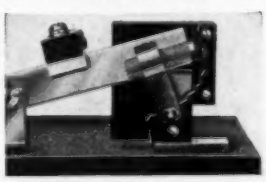


IT'S YOUR PIGEON, TOO, MISTER

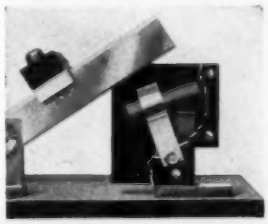




View of Rolarc snuffer showing blade in full engagement with live contacts before passing thru rollers towards OFF position.



View of Rolarc snuffer showing blade at point of final disengagement from live contact jaws.



View of Rolarc snuffer showing blade after disengagement from live contact and rollers. Rollers snapped together again obstructing path of possible arc.

THE FEDERAL Rolarc

..DESIGNED TO DO THE JOB

Winning the war is our problem—our job as much as it is the job of the men manning the guns. It's our "Pigeon"—and yours.

To get the job done—to help do it faster and better—Federal developed the 575 Volt Rolarc Safety Switch. Here's a dependable, hard working switch, 100 to and including 600 ampere capacity, built to carry the load.

Engineered on an entirely new principle of arc control, the Rolarc reduces the possibility of arcing to an *absolute minimum.* It lengthens switch life and conserves war-vital copper . . . it increases the safety factor and saves priceless time and power by eliminating dangerous arcing . . . it increases production by eliminating delays caused by switch failure.

If production is "your pigeon" let the Federal Rolarc Safety Switch help get the job done. *Get all the facts—write for bulletin 42-12.*

Until stocks on hand are exhausted we must reserve the right to ship our regular 575 Volt Safety Switch unless Rolarc is specified on the order.

FEDERAL ELECTRIC PRODUCTS CO.

52 PARIS STREET NEWARK, N. J.

PANELBOARDS • SWITCHBOARDS • SAFETY SWITCHES • CIRCUIT BREAKERS

TAKING care of tools is always good business. In times like these, when our Armed Forces need every tool that can be produced to keep a mechanized war rolling, it is doubly important to look after those you have.

The high quality of Klein equipment assures long life.

Take care of your pliers and wrenches—take care of your grips and climbers—take care of your belt and safety strap. If they're Klein's, you are fortunate in possessing equipment that is designed to give you the maximum in service. Proper care will assure your getting that service.

ASK YOUR SUPPLIER. *FOREIGN DISTRIBUTOR:* INTERNATIONAL STANDARD ELECTRIC CORP., NEW YORK

Since 1857

Mathias KLEIN & Sons
Established 1857 Chicago, Ill., U.S.A.
3200 BELMONT AVENUE, CHICAGO

Association News

CHICAGO—To celebrate the Christmas holidays, the Electric Associations' electrical maintenance engineers of Chicago held their annual holiday party at Colosimo's Restaurant a few days before Christmas and everyone enjoyed an excellent dinner and floor show.

NEW ORLEANS—The Electric Association of New Orleans held its annual dinner meeting and election of 1943 officers in the banquet room of the St. Charles Hotel. At the meeting President McCall reviewed the "high-lights" of the Association's activities in 1942 and gave an interesting talk regarding the war-time program for the coming year.

PATERSON—The Passaic County Electrical League, Paterson, New Jersey, held an interesting and timely meeting December 7 on the subject "War-Time Wiring." C. A. Finke, Research Engineer for the Okonite Co., Passaic, N. J., spoke on "Conservation of Existing Wiring." And E. G. Romeiser, Factory Representative of Porcelain Products, Inc., Findley, Ohio, talked on the subject "Porcelain Knob and Tube Wiring Installations."

KANSAS CITY—Mr. Samuel G. Hibben, director of Applied Lighting at the Westinghouse Lamp Division and chairman of the I. E. S. Committee on Defense, spoke to the Electric Association of Kansas City on December 8. He talked on the subject, "Peculiar Uses of Light As Victory Ammunition," at the Association's regular luncheon meeting held at the Hotel President.

CHICAGO—The Women's Division of the Electric Association of Chicago held its annual gala Christmas party at the Civic Opera Building. The program consisted of a turkey dinner served in the fine Electric Club style, an entertaining Christmas playlet presented by some of the women, and prizes, many of which were war bonds and stamps.

CINCINNATI—The Cincinnati Electrical Association of this city includes in its varied program such activities as informal weekly luncheon meetings by the members of the Manufacturers' Division, with dinner meetings by the Women's Division, and other special group meetings. Recently members of the Cincinnati Association and the Electrical Maintenance Engineers Association were invited to be guests of the American Institute of Electrical Engineers at a meeting where Mr. R. J. McKee and Mr. H. L. Huntley discussed current electrical maintenance problems.

OBITUARIES

George L. Patterson

One of the deans of the electrical wholesaling industry, George L. Patterson, founder of the firm of Stanley and Patterson, died on December 7 at a New York hospital.

During his long and fruitful life George L. Patterson left many permanent marks on the electrical industry which he served since he came from Portland, Maine, in 1889 to work in a small New York jobbing house.

He not only built up the second largest wholesaling business in the World's largest city, but also developed and manufactured the famous Faraday line of electric bells, fire alarms and signalling devices. Yet he found time to be

an inspired leader and an active force in furthering cooperation among the several units of the electrical industry.

It was he who brought together some eastern jobbers for a luncheon in New York in the early 1900's. That day an association was organized that later merged with the midwestern group to form the Electrical Supply Jobbers Association, forerunner of the National Electrical Wholesalers Association.

Mr. Patterson's first job in New York was with Hazazer and Stanley, a small jobbing firm for which he soon went on the road to sell wire, batteries and buzzers. The firm later became Stanley and Hall and when he purchased a share of the business the famous name of Stanley and Patterson came into being. The company grew rapidly as a wholesaling house, taking an active role in later years as distributors of radio sets, parts and appliances. During the middle 1920's, the wholesaling end of the business was sold to Westinghouse.

Meanwhile, in 1908, the firm of Stanley and Patterson had entered the manufacturing field with its own development, the Faraday signal gong, and became well known nationally as the line increased to include further developments in electric signalling developments. The company also expanded through the purchase of the P. R. Manufacturing Co., of Detroit, which had a line of small iron and wood buzzers.

Finally Mr. Patterson became a leading

Latrobe PRODUCTS

★ FLOOR BOXES ★ WIRING SPECIALTIES ★

HIGH QUALITY — EASILY INSTALLED

FOR EVERY INDUSTRIAL, COMMERCIAL OR RESIDENTIAL REQUIREMENT

Latrobe products are being used extensively in Government projects and in industrial plants engaged in war production. Less time for installation and assured dependability give them preference also for all commercial and residential jobs, both temporary and permanent.

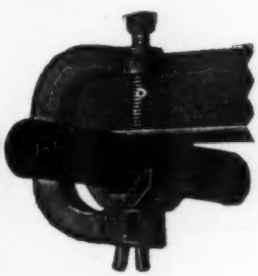
Every Latrobe product is flexible as to use. Made of the best materials, economical and long lasting.

NO. 284 RECEPTACLE NOZZLE

One of the many "Latrobe" type nozzles for watertight floor outlets. No. 284 is a duplex nozzle. Very neat and compact. ½ inch brass pipe extension. Or, if required, ¾ inch pipe extension.

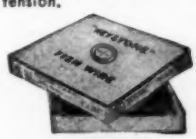
NO. 110 LATROBE WATERTIGHT BOX

Here is a cut-away view of the No. 110 Watertight Box showing how the tapered unit receptacle fits tapered opening in top of box body. This box is constructed of fewest number of parts, may be installed quickly, provides ample wire space inside the box and makes a safer job.



PIPE OR CONDUIT HANGERS

No. 470 Hanger handles ½", ¾" and 1" pipe to steel beams ⅜" thick. Turns freely. No drilling or use of straps.



KEYSTONE FISH WIRE

Made of the finest grade flat steel wire properly tempered. Ten sizes. Packed 100, 150 and 200 foot coils. Other lengths if required.

"BULL DOG" INSULATOR SUPPORTS

Malleable iron of high tensile strength for fastening porcelain and glass insulators to exposed steel framework.

FOR BEST RESULTS
STOCK LATROBE PRODUCTS
SELL LATROBE PRODUCTS

DURABLE — ECONOMICAL

FULLMAN MANUFACTURING CO.
LATROBE . . . PENNSYLVANIA

QUAD

LIGHTING UNITS
ALL HAVE CORRECT
BASIC DESIGN
and
CONSTRUCTION
FEATURES

★ ★ ★

QUAD

QUADRANGLE RLM

★ When you sell QUAD Lighting Units you sell products scientifically designed to give your customers the highest lighting efficiency. Full line of industrial and floodlighting equipment—incandescent—fluorescent—mercury vapor. It's the line that stays popular.

NO. 1184-M
RLM THREADED
DOME REFLECTOR

QUADRANGLE MFG. COMPANY
Mfgrs. of Incandescent and Fluorescent Lighting Equipment
32 SO. PEORIA ST. CHICAGO, ILL.

figure in the signalling and communication field through the purchase of the De Veau Telephone Manufacturing Co., which had a well-known line of telephones, annunciators, hospital signalling systems, etc. By 1900, Stanley and Patterson had more than 300 men and 110,000 square feet of floor space for manufacturing alone. This part of Mr. Patterson's activities he relinquished a few years ago through sale to the Schwarze Electric Co.

Throughout the years, George L. Patterson was an active, seemingly tireless, personality who poured out energy and ideas for the benefit of the industry without apparent diminution of the source. In March, 1923, as one of the "Men You Should Know," Mr. Patterson was described in this publication (then called *Jobber's Salesman*) as "An observer and a thinker, who has boiled down his jobbing experience to certain sound and fundamental principles, which he believes are best for the industry. To come in contact, even once, with him means to come away with one very decided impression. More contacts, and his impression is strengthened until it becomes the chief index to the character of the man. And it is this: you seem to have been in the presence of a radioactive personality."

David S. Youngholm

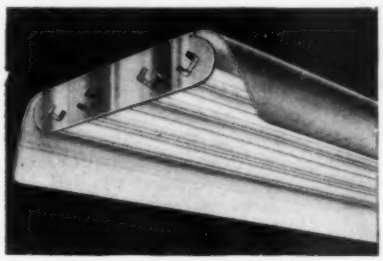
David S. Youngholm, vice-president of the lamp division of the Westinghouse Electric and Manufacturing Co., died on December 4 at his home in Bloomfield, N. J. He had suffered a heart attack.

Mr. Youngholm, who was 53 years old, has been well known in the lighting industry for many years. He had joined the

Westinghouse Lamp Co. in 1909, taking a position in the engineering department. He later served in the Stock and Statistical Department and then in the Sales Department, with headquarters at various times in Chicago, Kansas City and St. Louis. In 1920 he was placed in charge of production at the plant in Bloomfield. In 1923 he was appointed assistant manager of sales, and in 1924 became assistant general superintendent. He was made assistant to the vice-president of the company. Three days before the reorganization of the Westinghouse Lamp Company as the lamp division of the Westinghouse Electric and Manufacturing Co., Mr. Youngholm was made vice-president of the latter company.

New Products You Can Sell

FLUORESCENT UNIT



"Maze-lite", industrial non-metallic reflector-unit, is available with the recently announced "Forlamp" ballast for 265 volt circuits. It is also available for 110-125 and 220-250 volt circuits; in two sizes, either for 4-40 watt or 4-100 fluorescent lamps. This unit is designed to furnish high-intensity lighting for industrial inspection areas or for illumination in high-bay areas. The Edwin F. Guth Co.,

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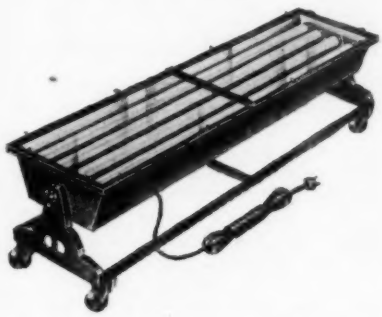
PORTABLE FIXTURE



Portable fixture "Crawler", for production, inspection and servicing operations, accommodates two and four 40-watt lamps. It is designed for localized lighting in production plants where it is desirable to provide quickly available illumination on surfaces that cannot be properly lighted by overhead luminaires. Unit is equipped with either dust-tight or wire safety screen covers, available for 110 or 220 volt, 60 cycle a.c. Base is fitted with large free-rolling swivel casters for easy portability. Day-Brite Lighting, Inc., St. Louis, Mo.

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Only 6 Ounces of Steel Per Foot

THE NEW SPERO DUR-O-LITE REFLECTOR AND RACEWAY OF NON-METALLIC MATERIAL

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Because this fixture takes 90% less critical steel, you can now keep right on selling fluorescent lights to help speed war production. Besides meeting the requirements of the new limitation order L78, which prohibits steel reflectors, this new unit also eliminates steel from the raceway. Reflector and raceway are made of synthetic resin-bonded plywood—the strongest non-metallic structure—used successfully in airplanes, gliders, PT boats, etc. . . . Designed for industrial installations, Spero DUR-O-LITE meets Bureau of Standards specifications for reflectors. Reflecting surface has high-gloss white enamel finish (reflection factor 88%), exterior surfaces are battleship gray. Available for two or three 40 watt tubes.

This unit may also be equipped with the new Spero development "INSTA-LITE", which provides instantaneous illumination, without flicker or delay. INSTA-LITE eliminates the starter and with it 85% of the trouble of average fluorescents—thus greatly reducing maintenance costs. Lighting starts at lower temperatures and lower voltage—there are no false starts to shorten tube life.

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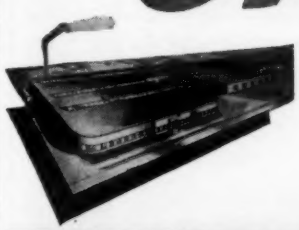

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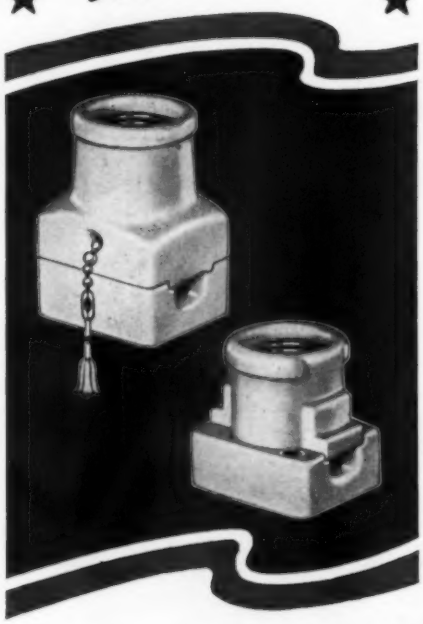

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MORE FACTS ON PRODUCTS

A.C. Welders—New twelve-page booklet, B-3136, contains many illustrations, specifications, and descriptive data on the Flexarc a.c. welders made by Westinghouse Electric & Mfg. Co. of East Pittsburgh, Pa.

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Safety Switch—Six-page bulletin, No. 42-12, describes the new Federal 575 volt Rolarc safety switch, includes illustrations and specifications, published by Federal Electric Products Company, Inc., Newark, New Jersey.

When writing mention WHOLESALER'S SALESMAN

Unit Substations—Thirty-six page booklet, GEA-3800, contains illustrations of actual installations, sketches of typical system arrangements, specifications, weights and dimensions of the master unit substations made by General Electric Company.

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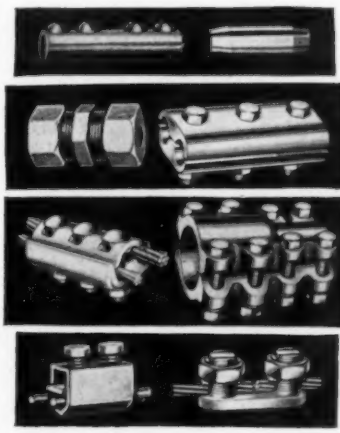

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Color Code Chart—In handy pocket size form, a color code resistor chart offered by Sylvania Electric Products Inc. of New York City for distribution as a dealer help, clearly shows the A, B, C, and D color denotations of a resistor, explains the resistor color code and gives examples. On the reverse side is Ohm's Law, one of the basic radio circuit formulas.

When writing mention WHOLESALER'S SALESMAN

Control Equipment—Revised 16-page edition of Bulletin No. 3000 on circuit breaker and fusible switchboards has recently been announced by Square D Company, Detroit, Michigan. Contains illustrations and complete information on the various types of switchboards built by this company.

When writing mention WHOLESALER'S SALESMAN

Fluorescent Lighting Equipment—Catalog sheets, L-78 series, picture seven industrial lighting units for utilization with fluorescent lamps, includes masonite reflectors, non-metallic shielding eggcrates, "forlamp" units, mechanic's portable, and quick-starting fluorescent units. Edwin F. Guth Co., St. Louis, Mo.

When writing mention WHOLESALER'S SALESMAN

Industrial Lighting—Curtis Lighting, Inc., Chicago, Illinois, has available a 12-page industrial war booklet, Serial 2130 describing its latest equipment in fluorescent fixtures with particular emphasis on the new "Fluratex" nonmetallic reflector units and the silver mirrored glass reflector units for high bay installations.

When writing mention WHOLESALER'S SALESMAN

Pole Line Hardware—Hubbard & Company of Pittsburgh has available an interesting 8-page folder called "Test Edition." Throughout the pages are various illustrations showing some of the actual tests made with Hubbard's pole line hardware products to insure the highest possible quality.

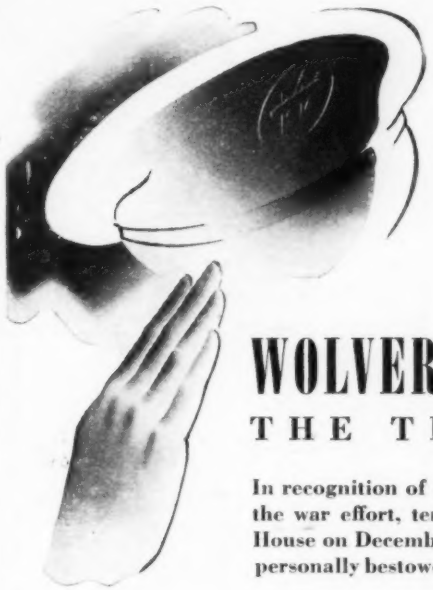
When writing mention WHOLESALER'S SALESMAN

Resistor and Relays—Ward Leonard Electric Co., Mount Vernon, New York, has recently published two bulletins. Bulletin 23 describes the Vitrohm strip resistor, including dimensions, ratings and sizes, and construction data. Bulletin 104 lists prices, and particular features of the midget metal base relays, plus contact data and mounting diagrams.

When writing mention WHOLESALER'S SALESMAN

Ventilating Equipment—New colorful brochure entitled, "Ilg Fights Its Second War," is ready for distribution by the Ilg Electric Ventilating Co. of Chicago. In 42 duotone photographs, the company pictures the wide use of Ilg self-cooled motor propeller fans, universal blowers and unit heaters in both World War 1 and World War 2.

COOPERATION WINS THE WAR



WOLVERINE SALUTES
THE TEN WINNERS

In recognition of their noteworthy contributions to the war effort, ten men were invited to the White House on December 10 to receive individual awards personally bestowed on them by President Roosevelt.

In this ceremony, the first of its kind in the country's history, six of the workers, chosen from the war industries in cooperation with local labor-management committees, received Citations of Individual Production Merit, signed by Donald M. Nelson; and the four other workers received Certificate Awards.

Wolverine's salute to these men carries a deep feeling of pardonable pride because among them is one of our own men, Walter P. Hill, whose development of a new process of manufacturing primer tubes is now used in the firing mechanism of millions of large shells. Through his untiring efforts many worthwhile savings in critical materials have been effected, and great reductions have also been made in man-hours and machine time.

WALTER P. HILL
"Production Soldier"

The Citation Award winners, in addition to Hill, are: Joseph H. Kautsky, Link-Belt Co.; Clinton R. Hanna, Westinghouse Electric and Mfg. Co.; Edwin Curtiss Tracy, RCA Manufacturing Co.; Madison E. Butler, Stromberg-Carlson Telephone Mfg. Co.; and James A. Merrill, Goodyear Tire and Rubber Co.

Certificate Awards went to George Smolarek, Packard Motor Car Co.; Daniel Walter Mallett, Borg-Warner Corp.; Herbert Ruper James, National Tube Co.; and Stanley Crawford, RCA Manufacturing Co.

Men, you've done it! We're proud of you, and we are happy in the thought that you are receiving the public recognition you deserve. We hope your achievements will serve as stimulants to even greater employee participation in factory suggestion-box system, where more good ideas may be born and mature into helpful devices that will bring us an early peace.

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